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WORLD FOOD SITUATION 1946-47

THIS IS THE THIRD PRELIMINARY REPORT ON THE 1946-47 WORLD FOOD SITUATION ISSUED BY THE OFFICE OF FOREIGN AGRICULTURAL RELATIONS SINCE THE BEGINNING OF THE CURRENT FOOD PRODUCTION AND MARKETING YEAR ON AUGUST 1, 1946. THE CHIEF PURPOSE OF THESE REPORTS HAS BEEN TO INDICATE GROWING CONDITIONS AFFECTING FOOD PRODUCTION AND THE SUPPLY AND DEMAND SITUATION FOR FOOD PRODUCTS IN THE VARIOUS PARTS OF THE WORLD THIS SEASON AS COMPARED WITH LAST SEASON AND THE PREWAR AVERAGE. THE FIRST REPORT (WFP 1-46) WAS ISSUED ON JULY 29, 1946 AND THE SECOND (WFP 2-46) ON AUGUST 30, 1946. THE FINAL REPORT FOR THE YEAR IS SCHEDULED FOR FEBRUARY 1947.

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Approved by Outlook and Situation Board
October 23, 1946

WORLD FOOD SITUATION 1946-47 *

World Summary

World food production in 1946-47 will be about 7 percent above the low level of last year and may be slightly above the prewar average. While the most pronounced increases in production occurred in the war devastated areas and in areas stricken by drought in 1945-46, output in many of these areas is still far below average and they are in urgent need of continued large imports during 1946-47. Much of the increase in production this year is in areas where supplies are not readily available for export. Therefore, such exports of food products as are available must be carefully utilized if an acute shortage is to be averted next spring.

The demand for exportable food supplies promises to be nearly as great during the 1946-47 consumption year as it was in the past year, while exportable supplies of all foods, in terms of calories, may be no larger. Supplies of breadgrains available for export may be somewhat smaller because of the sharp reduction in stocks last year. Rice supplies available from exporting countries are likely to continue at about last year's low level. Some increase is in prospect in the quantities of sugar, fats and oils, and fish available for export but these increases will be partially offset by smaller exports of meat, dairy products and eggs.

The demand for food imports is stimulated by the low level of food stocks in both exporting and importing countries and a desire to increase stocks sufficiently to overcome the day-to-day problems of distribution. There is also a desire, on the part of many countries, to increase the rations of their population over the extremely low levels of last year when physical endurance was lowered by malnutrition. Also, in many countries, particularly in the Western Hemisphere, where purchasing power has been stimulated by a high industrial activity or by high prices for raw products, people are demanding more food and a better diet than they have ever had before.

In comparing the 1946-47 food production with prewar, the increase in population of at least 7 percent also must be taken into account. On a per capita basis food supplies for the current consumption year are about 5 percent below prewar.

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* The food production and marketing year varies somewhat from region to region, but in general this report is concerned with the period from about August 1, 1946 until crops from the 1947 harvest become available for consumption.

Although there has been some increase in rationed food in several countries following the new harvest, the experience of the past year has resulted in more caution in the relaxation of the food controls than was practiced a year ago following the end of hostilities. Since import demands at current prices for most staple foods remain considerably in excess of exportable supplies, there is a continued need for international consideration by the International Emergency Food Council. The present plan is to continue the allocation of foods until the end of 1947 or as long as a world shortage exists.

During the current calendar year a large part of the international food shipments has been on a non-commercial basis. The largest item in this category was relief shipments by UNRRA, individual governments, and private individuals and organizations. Military shipments for civilian feeding in occupied areas were substantial, particularly in the case of the United States. Substantial shipments of food were made also as part of the winding-up of the United States lend-lease program.

With this program wound up, and with UNRRA discontinuing its activities at the end of 1946 (except for the Far East), most of the international food shipments in 1947 will be on a purchase basis. Leaving military shipments aside (which are not included in the usual trade statistics), it appears that more than four-fifths of the prospective 1947 food exports from the United States will be on a cash or credit basis. (In contrast, in the first half of 1946, nearly one-half of the United States agricultural exports consisted of lend-lease goods and of UNRRA and other relief shipments).

In the case of most other agricultural exporting countries, the proportion of food exports on a gift basis is likely to be even smaller than for the United States with its large population - where shipments are made by churches and other charitable institutions and by individuals.

The purchases of food by foreign countries will, of course, be dependent both upon the availability to them of gold and foreign exchange and upon the relative urgency for industrial or nonfood imports. In many instances their exports will continue to be far below their import needs; but accumulated gold and exchange reserves and international loans will provide a large supplementary reservoir of means of payment. The countries of the Western Hemisphere, the European neutrals, and India have greatly increased their gold and exchange holdings; thus they are able to finance larger imports than before the war. The exchange position of those belligerent countries which have encountered balance-of-payment difficulties as a result of the war will be eased by the gradual disbursement, during the next few years, of the United States loans to the United Kingdom, of a large total of Export-Import Bank loans, and of the loans by Canada to the United Kingdom and other countries, by other intergovernmental credit arrangements, and by the prospective activities of the International Bank for Reconstruction and Development and of the International Monetary Fund.

On the whole, it appears probable that this variety of sources of foreign exchange will make it possible for many countries to pay for their necessary food imports. A number of countries will, however, continue to restrict imports of necessary foods and of other necessities, such as reconstruction materials. Among the items so restricted are fresh and canned fruits, which many of these countries have classified as luxuries or semi-luxuries. But, with a gradual easing of their exchange position, they may gradually increase the exchange allocations also for the importation of non-essential foods.

While transportation facilities in some of the most seriously devastated areas have been repaired to some extent during the past year, the shortage of transportation equipment is likely to continue to be a problem in the distribution of food supplies in many areas in 1946-47. In several countries the replacement and repair of transportation facilities have not kept up with depreciation and scrappings, and are limiting the volume of food supplies which can be moved to ports for shipment as well as the movement of products from importing centers to points needing relief. There are also shortages of rail equipement and facilities for coastwise and inland water transportation, which prevent efficient utilization of food supplies within the boundaries of several countries. This problem is particularly serious in Brazil, China, the Philippines, and the Netherlands East Indies.

Increase in Food Output, Result of Larger Crops

The supplies of nearly all food crops during 1946-47 will be larger than in 1945-46 but little increase is expected in the supplies of livestock products. The short meat situation is being partially relieved in many areas by the increased fish catch and fishing fleets are approaching their prewar capacity.

Production of wheat and rye is about 12 percent above the small crop of 1945-46 and about 96 percent of prewar. Approximately half of the increase in the world wheat crop is in countries having little effect upon world trade in wheat and flour. Moreover, the depletion of stocks offsets in considerable measure the increase in production so that total breadgrain supplies available this year again appear small in relation to requirements. The shortage of rice and other foodstuffs, also feedgrains for food use, all combine to augment the demand for wheat and flour.

Present conditions for the rice crop in the important producing countries indicate a somewhat larger crop than that harvested last year, but largely because of reduced acreage it is still below the prewar average. The greatest decreases in acreage compared with prewar have been in the exporting countries of southeastern Asia, which together with unfavorable weather, are causing a reduction in the exportable supplies of rice during the coming year to about the same level as last year when they were only one-fourth of the prewar average.

An increase of approximately 10 percent is expected in the supplies of sugar during 1946-47. Larger crops are in prospect in Cuba, United States, and most European countries. Supplies of edible oil also will be slightly larger than in 1945-46 and quantities available for export in 1947, especially coconut oil, will be above this year's exports, but will still be less than half of the prewar exports of fats and oils. Supplies of dried fruits, nuts, and apples available for export also are above last year, but considerably below prewar.

Production of meats, dairy products and eggs is expected to continue at the reduced levels of 1946, and the quantities available for export in 1947 will probably be somewhat smaller than the exports of 1946, principally because of the prospects of smaller exports from the United States.

The countries of southern and western Europe and North Africa showed the greatest increases in food production over 1945-46 but crop prospects are also considerably more favorable than a year ago in many of the Far Eastern countries, particularly India, the Philippines, and Japan. About the only countries in the world where food production is at or below the levels of last year are the United Kingdom, Eire, Romania, Siam, Korea and Manchuria.

In Continental Europe as a whole (excluding Russia) production in 1946-47 is expected to total about 90 percent of prewar, which is a substantial increase over 1945-46 when it was less than 80 percent of prewar. Some further recovery in food production is also indicated in the Soviet Union during 1946-47, but is still well below prewar levels. Weather in the Middle East was generally favorable to crop production during 1946. This area will have adequate supplies for its needs, and will provide more than normal quantities of cereals, fruits, and nuts for export.

In the major countries of the Far East, crop production this year also is expected to be somewhat higher than it was last year. For the area as a whole, the food situation will be much less critical than in 1945-46. Production of rice, sugar, and vegetable oils in the surplus producing countries of this region, however, will be much less than in prewar and only small quantities of copra and palm oil will be available for export to the outside world. On the otherhand, this area will need large supplies of cereals and some sugar to avoid distress in the deficit food producing countries.

Continued wet weather during the harvest season in the United Kingdom and Eire has substantially reduced the output of food crops in this area and feeding prospects for the coming year are uncertain.

Food Production in Selected Countries, 1940-46 as Percent of Prewar Average

(Computed in terms of calories)

Country	Base Period	1940	1941	1942	1943	1944	1945	1946 1/
Europe 2/								
Norway 3/	1933-37	-	-	-	120		113	127
Sweden	1933-37	-	-	-	110		110	115
Denmark	1933-37	-	-	-	123		132	132
Belgium	1934-38	-	-	-	156		95	104
Netherlands	1933-37	-	-	-	132		79	96
France	1933-37	-	-	-	95		72	94
Spain	1931-35	-	-	-	89		68	96
Italy	1933-37	-	-	-	99		66	90
Switzerland	1933-37	-	-	-	138		129	128
Middle East								
Egypt	1936-39	101	90	103	95	98	107	104
Palestine	1936-39	129	106	124	130	124	142	(125)
Turkey	1934-38	120	104	91	121	98	73	(134)
Far East								
India	1935-39	100	97	100	116	110	103	(110)
China 4/	1931-37	99	94	94	95	107	100	105
Japan	1932-36	100	102	114	107	99	83	97
United Kingdom 5/	1934-38	106	114	136	151	139	138	(120)
Eire	1934-38	100	109	99	107	108	113	(100)
British Dominions								
Canada	1935-39	157	95	157	85	133	100	134
Australia	1934/35-38/39	76	108	103	84	66	97	(105)
New Zealand	1934/35-38/39	120	114	114	104	110	106	(110)
Un.of So.Africa	1934/35-38/39	112	85	114	102	98	92	(105)
United States	1935-39	114	122	133	132	139	138	138
Latin America								
Mexico	1935-39	106	128	141	128	144	129	143
Cuba	1936-40	99	87	118	103	140	127	148
Brazil	1934-38	122	122	124	126	136	130	134
Uruguay	1934/35-38/39	100	117	102	122	89	97	(100)
Argentina	1934/35-38/39	122	104	104	125	94	86	(105)
Chile	1934/35-38/39	96	99	105	116	111	114	(115)

1/ Preliminary. Indices in parenthesis are estimates based on weather conditions in the growing season rather than on computations of recorded production.

2/ Excludes food produced from imported feed.

3/ Includes only that part of the whale oil production that is used in Norway for food. 4/ Based on production in 15 provinces of southern and western China, for details see page 50. 5/ Including food produced from imported feed and livestock.

In the British Dominions the production of food cereals is much above last year but the quantities available for export will be less because of reduced stocks. Conditions for livestock production have also improved with increased feed supplies but supplies of livestock products for export are not expected to increase materially during the current consumption year.

Food output in the United States continued at the high levels of the last 2 years with increases in crop production offsetting the decline in livestock products. In Cuba, output has reached new high levels due largely to expansion in sugar production. In Brazil, where crop output is measured on a calendar year basis, food output during 1946 is believed to have been almost as large as the record output of 1944.

In the southern part of South America, spring crops are off to a good start and acreage in food crops has been expanded. Should favorable weather continue, food output should be much above the low level of the last 2 years unless locust damage, which is threatened, becomes serious.

SITUATION BY REGIONS AND COUNTRIES

CONTINENTAL EUROPE

Summary

Domestically-produced food supplies in continental Europe in 1946-47 will be considerably larger than in 1945-46, but well below the prewar average. Weather conditions, so adverse in 1945, this year favored an increase in acreage and yields in most countries. Farm operations could proceed more smoothly this year than last, when the closing campaigns of the war were being fought over large parts of Europe. At the same time, the shortage of farm supplies, notably fertilizer, which grew throughout the war period and became especially acute toward the end, continued unabated in some areas and was but partially relieved in others. Economic and political difficulties, caused by the war and the changes consequent upon its conclusion, still impede the recovery of agriculture, especially in the defeated nations.

The increase in crop output compared with 1945 has been most striking in Mediterranean and Western Europe, the main wheat growing regions. Output in Central and Eastern Europe, where rye is the chief grain, is expected to show a comparatively modest increase over the low 1945 level. In the Danube Basin, wheat recovered strongly, but the important corn crop has been damaged by a severe summer drought. However, total grain production in the Danube Basin as well as in other parts of Europe will be larger than last year. Most countries also expect a considerably better harvest of potatoes and sugar beets. Production of fats and oils will be up from 1945-46. While the oilseed crop has shown a decline, a marked increase in olive oil output is anticipated at present, and some improvement is likely for butter and slaughter fats. Since livestock numbers recovered somewhat in 1945-46 and domestic feed supplies during the coming months will be more abundant than last winter, livestock products in 1946-47 should exceed last year's low level.

Total production for food will be nearer to the prewar average than farm output, for, as in the past several years, most countries will continue to extract more flour from grain than is customary and to use for food a part of the grain and potato crops ordinarily reserved for livestock. Making allowance for such shifts in crop utilization compared with prewar, the continent's food output, in terms of energy value, for the consumption year 1946-47 is tentatively estimated at close to 90 percent of the 1933-37 average, as against less than 80 percent in 1945-46.

Since continental Europe as a whole was on a deficit basis in prewar times, importing some 10 percent of its food supply (including feed in terms of food) for a population somewhat smaller than at present, the gap between indigenous production and consumption at prewar levels obviously remains wide. Moreover, shipments from the formerly surplus-producing regions of eastern and southeastern Europe to the west are likely to be insignificant in 1946-47 as in 1945-46. Many countries will not be able to maintain even the 1945-46 consumption level, much less build up depleted working stocks, without substantial imports from overseas. At the same time, the need for an increase in food consumption has been intensified by another year of hunger and deficiency.

During 1945-46 continental Europe received large quantities of food from outside sources. Net imports (excluding food consumed by occupation forces and trade on reparations account) are tentatively estimated at over 13 million short tons of grain for food and flour in terms of grain, some 725,000 short tons of sugar, over 575,000 short tons of pure fat for food, and nearly 350,000 short tons of meat plus some quantities of canned and powdered milk, fish, legumes, and other products.

These imports were insufficient to raise nonfarm consumption to reasonable minimum levels throughout the continent. Western Europe, Scandinavia, and Czechoslovakia fared relatively well, in some cases quite well. During 1945-46 average per capita daily nonfarm consumption, both rationed and off the ration, amounted to 2,900 calories or more in Denmark, a net exporter of food, from 2,750 to 2,800 calories in Sweden, which was almost self-sufficient, and to over 2,600 calories in Norway. It ranged between 2,400 and 2,600 calories in the Netherlands, Belgium, and Switzerland and between 2,200 and 2,400 calories in France and Czechoslovakia. Consumption in the western European countries moved on lower levels in the last half of the season than in the first half, but the nonfarm energy intake in all of them continued to exceed an average of 2,100 calories per day.

Elsewhere on the continent the food situation was very unsatisfactory, especially in the spring of 1946. At that time average per capita daily nonfarm consumption, both rationed and off the ration, ranged between 1,600 and 2,000 calories in Spain Portugal, Greece, and Finland. The nonfarm population in Italy, Austria, and western Germany had an average of less than 1,600 calories daily. Consumption was also low in the urban and deficit rural areas of Poland, Hungary, and Yugoslavia.

During the summer and fall, the food situation improved seasonally in a number of countries. Prospects of a more than temporary increase in consumption in 1946-47, however, depend upon imports. With production at the levels that now appear likely, imports 80-85 percent as large, in terms of calories, as those of 1945-46 should permit an average energy intake by the nonfarm population of 2,400 calories in practically all Allied and neutral countries and 2,000 calories in all deficit ex-enemy countries, provided that working stocks remain small.

The 2,400 calorie standard is 90 percent or less of prewar consumption for most countries and would not admit a rationed consumption of 2,000 calories in some of them. The 2,000 calorie standard, which would mean a considerably lower rationed consumption, is 80 percent or less of prewar consumption in most ex-enemy countries.

To improve appreciably the quality and palatability of the diet while increasing the calorie intake, substantial quantities of animal protein foods, fats, and sugar would have to be imported. In 1945-46 as in the war period, consumption of these foodstuffs was far below the prewar average in most countries, the drop compared to prewar being partly offset by higher than average consumption of grains and potatoes. Net imports as large as those of last year would suffice to raise per capita consumption in most countries in 1946-47 to 80 percent of prewar for meat and sugar but not for fat. Should net imports of meat, fat, and sugar reach last year's level, another 10 million short tons of food, in terms of wheat equivalent, would be needed to meet the indicated calorie standards.

France

Agricultural output in France will be much larger in 1946-47 than in 1945-46. During the growing season just ended, in sharp contrast to the preceding one, weather conditions favored seeding operations and crop growth. More fertilizer was available also. Actual distribution through May 1946, exclusive of mixed fertilizers, amounted to 97 percent of 1938-39 consumption for nitrogen, 84 percent for potash, and 25 percent for phosphoric acid; the corresponding figure for mixed fertilizers was 31 percent.

Official estimates as of September 1 indicate that, while the acreage under grain is still well below prewar levels, the yield per acre of wheat, barley, and oats in 1946 will be somewhat above the 1933-37 average. If the rain during September caused no great damage, 1946 grain production may reach 80 percent of the prewar average. Forecasts for potatoes and sugar beet for 1946, at around 75 and over 70 percent of prewar, respectively, are also more optimistic than last year. Production of table fruits and vegetables is expected to reach the prewar average.

An improvement in the output of livestock products is also anticipated. According to preliminary estimates, the number of hogs and cattle, especially young cattle but also cows, showed some recovery between the fall of 1945 and the fall of 1946. The outlook for feed supplies during the winter is more favorable than a year ago, for root crops as well as feed grains promise well and the hay crop has been abundant.

With the rise in farm output and assuming the maintenance of the now prevailing flour extraction rate, the energy value of total production for food in 1946-47 may be estimated at around 2,150 calories per capita per day, an increase of some 25 percent over 1945-46. Nevertheless, as is indicated by the accompanying table, France will need to import considerable quantities of food merely to maintain 1945-46 consumption levels.

Per capita consumption (excluding alcoholic beverages) for the entire population, which averaged 2,800 calories daily before the war, has been tentatively estimated at 2,400 calories daily in 1945-46. This means an average of around 2,200 calories for the nonfarm population, and some 900 of these calories came from locally-rationed, unrationed, and black-marketed food. The weighted average for rations established on a nation-wide scale is still about 1,300 calories.

FRANCE: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	9,875	11,000	458	1,610	300
Production for food, " " "	4,655	4,400	458	1,610	255
Net trade for food 2/ " " "	+2,370	+155	+270	+130	+275
Supplies for food:					
Total " " "	6,340/3	4,555	728	1,740	530
Per capita 4/, pounds	309/3	222	36	85	26
Per capita in % of prewar 5/	104/3	85	70	82	75
1946-47					
Total production, 1000 sh. tons	13,835	13,230	660	1,775	315
Production for food:					
Total " " "	6,640	5,250	660	1,775	275
Per capita 4/, pounds	286/6	253	32	86	13

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat and excluding slaughter fats.
2/ Net imports +; net exports -. Grains include flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat and rye 87.5%; barley 65%, oats 60%, corn 70%. Allowance has been made for decrease in stocks.
4/ Estimated population 41 million 1945 and 41.5 million 1946 as compared with 41.9 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: wheat and rye 90%, the rate now prevailing; other grains as in footnote 3.

If the calorie value of rations is to be increased in 1946-47 and if at the same time the composition of the diet is to approach the prewar pattern, imports of sugar, fats, meats, and other animal protein foods cannot fall far short of imports in 1945-46. Grain import needs for food, however, will be only a fraction of last year's, even if the 1945-46 average consumption level is reached. During August-October 1945, the normal consumer bread ration was 350 grams daily, and in November-December bread was derationed, consumption showing a marked increase. But in January 1946 bread was again rationed at 300 grams daily for normal consumers. Should bread rations be maintained at the level prevailing since January, import needs of grain for food in 1946-47 would be negligible.

Belgium

Agricultural production in Belgium in 1946-47 will be substantially higher than in the preceding year. This is particularly true for crop

BELGIUM: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	1,285	1,650	150	185	55
Production for food, " " "	225	1,070	150	185	55
Net trade for food 2/" " "	+1,270	+30	+20	+100	+70
Supplies for food:					
Total " " "	1,275/3	1,100	170	285	125
Per capita 4/, pounds	304/3	262	40	68	30
Per capita in % of prewar 5/	110/3	79	65	71	74
1946-47					
Total production, 1000 sh. tons	1,500	1,550	195	200	75
Production for food:					
Total " " "	300	1,025	195	200	65
Per capita 4/, pounds	58/6	244	46	48	15

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat and excluding slaughter fats.
2/ Net imports +; net exports -. Grains include flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat 81%, rye 83%, barley 70%, oats and corn 60%. Allowance has been made for net change in stocks.
4/ Estimated population 8.4 million 1945 and 1946 as compared with 8.3 million prewar.
5/ Average 1934-35 to 1938-39.
6/ In terms of flour. Extraction rates assumed: wheat and rye 85%, other grains as in footnote 3.

output although the increase in the output of livestock products, which was already apparent in 1945-46 may also be expected to continue. The improvement in crop production as compared with last year is due to the good weather conditions which prevailed during most of the growing season and a recovery in fertilizer supplies. Sown acreages showed a considerable drop, while meadow and pasture land expanded. Among the crops a shift from food to feed and industrial crops, already begun in 1945-46, was apparent. The decline in the acreage under wheat, rye, barley, peas, and potatoes amounted to 15 percent from the preceding year. The sugar-beet acreage, alone among the food crops, showed a substantial increase. The largest increases occurred in oats, flax, chicory, and tobacco.

The utilization of domestic crops for feed plus imports of some feedstuffs in the earlier part of 1945-46 resulted in a substantial increase in livestock numbers. Although the shortage of grains which developed probably checked increases, actual numbers at the beginning of the 1946-47 season are not far below prewar. Cattle numbers as a whole are within 5 percent of the 1934-38 average although dairy cow numbers are still 20 percent lower. Poultry numbers also are still about 30 percent below the prewar level. Other categories of livestock, however, have been virtually reconstituted. Output of livestock products in contrast to animal numbers, is still substantially below the prewar level due to the relatively low supplies of feedstuffs.

Domestically-produced food supplies in 1946-47 will probably provide something over 1,200 calories per capita per day, or more than last year, but still less than in prewar times. As is indicated in the accompanying table, imports of bread grains, meat, and fat will be necessary to maintain last year's consumption level, which, it is tentatively estimated, provided about 2,600 calories per capita per day, as compared with 2,800 before the war. The nonfarm consumption level averaged around 2,500 calories, of which approximately 2,000 came from rationed, the rest from unrationed and black-marketed, food.

Nonfarm consumption was higher in the last half of 1945 than in the first half of 1946, when bread rations were reduced by stages from 450 grams to 300 grams daily. If the 300 gram ration is maintained, import requirements of grain for food in 1946-47 will be below actual imports in 1945-46. Domestic supplies should permit an increase in sugar rations. But if meat and fat rations are to show some improvement in the coming year, imports of these foodstuffs will have to be at least as large as in 1945-46.

The Netherlands

Agricultural production in the Netherlands in 1946-47 will be at considerably higher levels than in 1945-46, due both to the larger acreage under cultivation and to greatly improved yields. Production of most crops is still below prewar levels, however, for, although crop acreages are well in line with some of the highest in prewar years, yields are still low for the Netherlands. The country obtained only partial relief from the shortage of fertilizers, of which it is normally one of the heaviest users per acre, and had several periods of unfavorable weather during the growing season. Extended rains during the harvesting season had a particularly bad effect on the grain crops, which had already suffered some deterioration from drought in the late spring. The rapeseed crop has virtually failed, but sugar beets and potatoes are reported in very good condition. Potatoes were derationed at the beginning of the current marketing season. Pastures and hay are no more than 60 to 70 percent of normal due both to the spring drought and the shortage of nitrogen. In general the areas which were inundated with salt water in 1944-45 are again producing, under special care and with selected crops.

Cattle numbers are recovering steadily, being now only 10 percent (milk cows about 12 percent) below the 1933-37 average. Milk production is about 70 percent of prewar and that of butter and cheese somewhat

NETHERLANDS: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	930	2,570	65	165	65
Production for food, " " "	385	1,590	65	165	65
Net trade for food 2/ " " "	+1,170	-45	+110	+65	+100
Supplies for food:					
Total " " "	1,270/3	1,545	175	230	165
Per capita 4/, pounds	273/3	332	38	49	35
Per capita in % of prewar 5/	122/3	115	50	56	71
1946-47					
Total production, 1000 sh. tons	1,335	4,475	200	185	60
Production for food:					
Total " " "	480	1,875	200	185	60
Per capita 4/, pounds	86/6	403	43	40	13

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat and excluding slaughter fats.
2/ Net imports +; net exports -. Grains include flour in terms of grain.
3/ In terms of flour, Extraction rates: wheat and rye 82.5%, barley 80%, oats 60%. Allowance has been made for net change in stocks.
4/ Estimated population 9.3 million 1945 and 1946 as compared with 8.5 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: wheat and rye 85%, other grains as in footnote 3.

lower because of a larger proportional diversion of milk to fluid consumption. Because of the need to conserve grain for food, efforts are being made to keep pig numbers from rising beyond the present level of about 60 percent of the prewar average. Poultry numbers are still only one-third of prewar, but egg production may develop sufficiently by spring to permit derationing.

Food output for 1946-47, because of improved production, and making allowance for better controls, is estimated to provide nearly 1,600 calories per person per day, or over 20 percent more than output in 1945-46. Domestic and imported supplies of foodstuffs in that year provided some 2,500 calories per capita per day, compared with an average consumption before the war of 2,800 calories. It is clear, therefore, that in spite of improved production in the 1946-47 season, substantial imports will be needed to maintain the consumption levels of 1945-46.

The gap between production of the major foodstuffs in 1946-47 and total supplies of the same commodities in 1945-46 is shown in the accompanying table. If the average consumption levels of the various foodstuffs in 1945-46 are to be maintained in 1946-47, import requirements of meat and fat will be as large or larger than imports last year, but smaller amounts of sugar will be needed. Requirements of grain for food will also be smaller than imports in 1945-46, especially if bread consumption is held to the levels prevailing in the summer of 1946. In that period the normal consumer bread ration stood at little more than 300 grams per day, compared with 400 grams earlier in the year, and the energy intake of the nonfarm population was consequently lower than the 2,400 calorie per day average for the 1945-46 consumption year.

Switzerland

The outlook for agriculture in Switzerland in 1946-47 is somewhat less favorable than last year mainly because of adverse weather affecting pastures, grains, and potatoes. In general, however, by comparison with prewar years, a high level of crop production and a greatly restricted output of livestock products continues to form the pattern of Swiss agriculture. Livestock production has been held back by the continuing shortage of feeds, due chiefly to meager imports, and this year the hay crop was poor. Because of world shortages of grains and other major foodstuffs, the government has continued its policy of maintaining high levels of production of food crops.

Total food output in the year just beginning, as a result, will still provide about 1,800 calories per person per day, or 20 percent more than the average for 1933-37. It is estimated that food supplies available in 1945-46, of which imports and stock utilization formed about one-third, furnished an average of 2,700 calories per day to the entire Swiss population. With farm consumption at a substantially higher level, the average for the nonfarm population was about 2,500 calories per day of rationed and unrationed food. The accompanying table indicates that for the main food items imports in 1946-47 will have to be about as large as in 1945-46 if present consumption levels are not to deteriorate. Prewar standards could again be reached only by importing very substantial quantities of sugar, meats, and fats.

Norway

The Norwegian grain crop of 1946 is not expected to differ greatly from that of the year before. In both years output is estimated at 20 percent below the 1933-37 average. There are indications, however, that some of this difference may be due to an overestimation of grain crops in prewar years. Potato output in 1946 is down from 1945, largely due to a reduction in acreage, but is still well above the prewar level. The 1946 hay crop has been good, and the outlook for the root crops is promising.

SWITZERLAND: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	560	1,875	30	143	35
Production for food, " " "	300	785	30	143	35
Net trade for food 2/ " " "	+400	-85	+40	+2	+25
Supplies for food:					
Total " " "	600/3	700	70	145	60
Per capita 4/, pounds	273/3	318	32	66	27
Per capita in % of prewar 5/	105/3	160	37	59	67
1946-47					
Total production, 1000 sh. tons	540	1,550	25	150	35
Production for food:					
Total " " "	300	690	25	150	35
Per capita 4/, pounds	115/6	314	11	68	16

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat and excluding slaughter fats.
2/ Net imports +; net exports -. Grain includes flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat, rye, spelt, and maslin 88%, oats and barley 60%. Allowance has been made for changes in stocks.
4/ Estimated population 4.4 million 1945 and 1946 as compared with 4.1 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: as in footnote 3.

Livestock numbers show an upward trend from the low figures of the war years. Imports of feedstuffs have made this increase possible. Cow numbers are now some 8 percent, hogs some 35 percent, below their 1939 figure. Norway, on the other hand, has more horses and sheep than before the war. In accordance with this recent increase in livestock numbers, the production of meat will be somewhat higher in 1946-47 than in 1945-46. It is nevertheless much below prewar production as the accompanying table indicates. Milk, butter, and cheese production will also be a little larger in 1946-47 than in 1945-46.

The Norwegian fishing industry, which during the latter part of the war had an annual catch of about two-thirds of the prewar average, came back to its old level of production in 1945-46 with a catch of 1,000,000 tons. About one-fifth of this amount is estimated to be consumed in Norway as food, while the rest goes into industrial uses or exports.

NORWAY: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	340	1,183	-	73	48/2
Production for food, " " "	99	430	-	73	48
Net trade for food 3/" " "	+463	-	+64	+5	+10
Supplies for food:					
Total " " "	444/4	430	64	78	58
Per capita 5/, pounds	291/4	282	42	51	38
Per capita in % of prewar 6/	127/4	107	57	61	77
1946-47					
Total production, 1000 sh. tons	332	1,102	-	86	70/2
Production for food:					
Total " " "	99	441	-	86	70
Per capita 5/, pounds	47/4	285	-	55	45

Office of Foreign Agricultural Relations - Revised as of October 1946.
Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat.
2/ Including that part of the Norwegian whale oil production which is used in Norway for food.
3/ Net imports +; net exports -. Grains include flour in terms of grain.
4/ In terms of flour. Extraction rates: wheat and rye 80%, barley 70%, oats 65%.
5/ Estimated population 3.05 million 1945 and 3.1 million 1946 as compared with 2.88 million prewar.
6/ Average 1933-34 to 1937-38.

In spite of this reasonably favorable development in respect of indigenous food production, Norway, which before the war imported more than 50 percent of the food consumed in the country, remains heavily dependent on imports. As indicated in the accompanying table, it produced only about one-sixth of its flour consumption from domestic grain in 1945-46. Because of the improvement in supplies of other foodstuffs, it may not be necessary to maintain as high a flour consumption in 1946-47 as in 1945-46, and imports of grain consequently may not need to be of the same magnitude. All sugar must be imported. If all whale oil produced by the Norwegian whaling fleet had been considered as domestic production, a net export of fat would have appeared in the table. While some butter and vegetable oil were imported in 1945-46, much larger quantities of whale oil were made available to other countries. No doubt this will also be the case in 1946-47.

Due primarily to the availability of whale oil as well as to the large grain imports, Norway improved its food situation very materially in 1945-46 as compared with the preceding years. Average consumption by the whole population is estimated at 2,750 calories per day in 1945-46. Allowing 3,000 calories as the daily per capita average for the farm population, this still leaves nonfarm consumption at the relatively satisfactory level of 2,650 calories daily. Such consumption levels can be maintained in 1946-47 only if grain and sugar continue to be imported in large amounts since indigenous production, after deduction of fish exports, can supply only some 1,600-1,650 calories per person per day.

Denmark

After four good crop years Denmark in 1946 again harvested an excellent grain crop. The potato crop is also estimated to be large - second only to the record crop of 1943. A series of favorable growing seasons, no doubt, account to a large extent for these good results obtained in spite of certain war-created shortages. For sugar beets and feed roots the outlook is a little less optimistic, the crop being estimated at some 10 percent below normal. The labor shortage - rather acutely felt by Danish farmers - may be in part responsible for this reduction.

Livestock numbers, which were seriously reduced during the early part of the war, came back during the later war years. Cattle numbers are almost up to prewar. There was a 2 percent decrease, however, in total cattle numbers from July 1945 to July 1946 although dairy cows registered some increase. Probably no great changes are to be anticipated in the near future. Hog numbers in July 1946 were some 7 percent above the July 1945 figure, but a significant reduction in the number of sows bred took place at the same time. However, the reduction in breedings took place prior to the new Danish-British trade agreement, which resulted in an increase in the price obtained by Danish farmers for livestock products, a fact which may check the anticipated downward trend. Chicken numbers in 1946 are about 10 percent above those of 1945, but still only 55 percent of prewar.

In 1945-46 oilcake again became available for the feeding of Danish dairy cows though on a much reduced scale as compared with the prewar supplies. As a result there has been an increase in total milk production, which now has reached 85 percent of the 1933-37 average output. Some further increase may be expected in 1946-47, which may be reflected in somewhat larger butter production. Total meat production (including bacon) will probably not differ much from that of 1945-46. The combined index for total production of animal products in 1945 stood at 69, for the first 6 months of 1946 at 78 (1935 = 100).

As the accompanying table indicates, Denmark had sizable export surpluses of meat, butter, sugar, and potatoes in 1945-46, and small increases in these exports are possible in 1946-47 - except perhaps

DENMARK: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	3,948	1,774	182	380	155
Production for food, " " "	649	829	182	380	147
Net trade for food 2/" " "	-30	-184	-36	-135	-74
Supplies for food:					
Total " " "	500/3	645	146	245	73
Per capita 4/, pounds	246/3	317	72	120	36
Per capita in % of prewar 5/	115/3	146	65	80	66
1946-47					
Total production, 1000 sh. tons	4,178	1,841	176	386	163
Production for food; "					
Total " " "	634	854	176	386	154
Per capita 4/, pounds	248/3	415	85	187	75

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry.
2/ Net imports +; net exports -. Exports include supplies for German displaced persons in Denmark. Grain includes flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat 80%, rye 90%, barley 68%, oats 58%.
4/ Estimated population 4.07 million 1945 and 4.12 million 1946 as compared with 3.71 million prewar.
5/ Average 1933-34 to 1937-38.

for sugar. Bread, sugar, and butter are rationed, but rations are fairly liberal and total domestic consumption is at a high level. It has been calculated at not more than 3,100 calories per person per day for 1945-46 and will probably not differ much from this very satisfactory level in the crop year of 1946-47.

Sweden

While the Swedish grain crop in 1946 is some 10 percent larger than the crop of 1945, it still remains about 15 percent below the average 1933-37 crop. This is due to some reduction in yields as well as to a 10 percent reduction in acreage. The potato crop is also considerably larger than that of the preceding year and fully up to an average prewar crop. Roots and hay, on the other hand, registered some decrease as compared with 1945 output. Livestock numbers in Sweden are very close to

SWEDEN: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass	Fats (fat content)
1945-46					
Total production, 1,000 sh. tons	2,481	1,829	298	295	112
Production for food, " " "	766	1,014	298	295	106
Net trade for food 2/" " "	+83	-	-	+9	+18
Supplies for food:					
Total " " "	670/3	1,014	298	304	124
Per capita 4/, pounds	197/3	298	88	89	36
Per capita in % of prewar 5/	89/3	98	92	93	99
1946-47					
Total production, 1,000 sh. tons	2,841	2,065	276	300	116
Production for food:					
Total " " "	885	1,025	276	300	109
Per capita 4/, pounds	212/6	297	80	87	32

Office of Foreign Agricultural Relations - Revised as of October 1946
Data partly based on official sources, partly estimated.

1/ Including poultry.
2/ Net imports +; net exports -. Grains include flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat and rye 81%, barley 75%, oats 55%.
4/ Estimated population 6.8 million 1945 and 6.9 million 1946 as compared with 6.2 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: wheat 84%, rye 89%, other grains as in footnote 3.

prewar levels, with cattle in the fall of 1945 only 3 percent below the corresponding figure for 1939, while hogs from April 1945 to April 1946 increased from 90 to 94 percent of the 1939 level. Chickens increased by 20 percent during the same period, numbering over 9 million now, as compared with only 7.7 million in September 1937. No great change in meat production is expected between 1945-46 and 1946-47, as the accompanying table indicates, whereas some increase in milk production is likely, and the egg production is expected to reach a higher level than ever before.

As a result of these developments, indigenous food supplies available to the Swedish people will be somewhat larger in 1946-47 than during the preceding year, and may be estimated to provide an average of 2,800 calories per person per day. There were, however, some imports of grain, fats, meat, and fruit in 1945-46 so that the actual level of consumption was around 2,900 calories daily, which, after allowance is made for a higher consumption by the farm population, leaves some 2,750 to 2,800 calories for the average nonfarm consumer. Bread, fats, sugar, and meat are rationed and will probably continue to be rationed since only careful planning of available resources makes this favorable consumption level possible until larger imports can be obtained.

Finland

Finnish agricultural production in 1946-47 shows little improvement over last year. Weather conditions have not been very favorable, and the country is still plagued by shortages of commercial fertilizer and feed concentrates, some dislocation due to the carrying out of the Land Reform Bill, and a shortage of agricultural labor. The higher wage scales in industry and forestry drew labor from the farms to the extent that adequate cultivation, particularly drainage of the land, could not be maintained.

Domestic production of all grains, as well as of bread grains, is estimated to have increased by 4 percent and potato production by 10 percent over 1945. Sugar production showed no change. Most of these increases, however, are due to larger acreages rather than higher yields.

Horse, sheep and hog numbers are estimated from 4 to 8 percent above 1945, but all cattle and cow numbers have remained about the same. Total milk production this year is about 7 percent larger than in 1945. Shortages of oilcake and other feedstuffs have not permitted a greater increase in milk and consequently butter production. The supply of meat and fats is still much below normal and it is expected that production will be only slightly improved over last year.

This situation is reflected in continued low rations which, however, have remained fairly steady since the beginning of the year.

Substantial imports of grains, sugar and some fats have enabled Finland to maintain these rations. Average per capita energy intake during 1945-46 has been tentatively estimated at 2,600 calories daily for the whole population. The average for the nonfarm population was probably around 1,900 calories, a considerable part of which was obtained from unrationed and black-marketed food. The food situation as illustrated in the following table shows that the continuance of imports will be necessary to bring the 1946-47 average consumption even up to the low level of 1945-46 and that a marked increase would be necessary to return to prewar levels of consumption.

FINLAND: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1,000 sh. tons	1,050	950	6	100	31
Production for food, " " "	455	560	6	100	30
Net trade for food 2/" " "	+240	-	+32	-	+7
Supplies for food:					
Total " " "	630/3	560	38	100	37
Per capita 4/, pounds	350/3	310	21	55	20
Per capita in % of prewar 5/	106/3	78	31	78	67
1946-47					
Total production, 1,000 sh. tons	1,090	1,050	6	102	30
Production for food: " " "					
Total " " "	470	620	6	102	32
Per capita 4/, pounds	215/6	325	3	54	17

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry.
2/ Net imports +; net exports -.
3/ In terms of flour. Extraction rates: wheat 92%, rye 98%, barley 70%, oats 55%.
4/ Estimated population 3.6 million 1945 and 3.8 million 1946 as compared with 3.6 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: wheat 85%, rye 98%, barley 80%, oats 55%.

Poland (Boundaries as fixed by Potsdam Agreement.)

It is still difficult to appraise Poland's food situation accurately. Much progress has been made since last year, when the possibility of making reliable crop estimates was thwarted by the confusion of the war, large movements of armies and whole populations and the acquisition of new territory half again as large as the remaining portion of the old Poland. Nevertheless, present statistical estimates are still beset by many difficulties such as large scale land reform, settlement activity, shortages of many means of production, whose effect on the crop outturn is hard to appraise, and a yet unsettled social and economic structure. For this reason the variation between crop estimates is wide, indeed. The high estimates of crop production in Poland are usually 50 percent above the low estimates and sometimes even higher.

The last crop year was generally favorable with a mild and somewhat dry spring which permitted spring planting to be carried out on a more extensive scale than could be expected with the insufficient means at hand. Growing conditions remained favorable and harvesting started a few weeks early.

The acreages of the major grains seem to have averaged about 75 percent of their prewar area. Yields also probably averaged around 25 percent below prewar, with much greater declines in the former German territories which had particularly high yields before the war and considerably smaller ones in rump Poland whose yields were generally between one-half and two-thirds of those in the German areas. The same reduction in acreage and yields holds roughly true for potatoes. Sugar is expected to be quite ample with considerable quantities available for export. The feed situation is satisfactory and livestock numbers, particularly hogs and poultry, are on the increase.

For present day Poland, which in prewar times had a large export surplus of food and a more numerous population than today, it is tentatively estimated that about 2,500 calories per capita per day (over 90 percent of prewar per capita consumption in old Poland) will be available from indigenous supplies in 1946-47. About 90 percent of the total is accounted for by starchy foods and the remainder by animal produce, vegetables, fruits, and vegetable oils. Thus, but for meats and fats and some minor foodstuffs Poland should be roughly self-sufficient. The lax control of food distribution, however, may bring distress in some urban centers unless some grain imports are made.

Food consumption during the past year has undoubtedly been very inadequate for large groups of the population. UNRRA supplies and some commercial shipments alleviated the situation by supplying about 200 calories of food per head of the total population or 350 calories per head of the nonfarm population, which was the major recipient.

Germany (British, French, American and Soviet Zones)

Agricultural output in Germany is estimated to be somewhat larger in 1946-47 than in 1945-46, but still well below the prewar average. While weather conditions during the growing season just ended were favorable on the whole, they were not strikingly better than in the preceding season. At the same time, the continued disorganization of the nation's economy hindered the effective application of agricultural programs and controls, hampered farming activities, and intensified the scarcity of farm supplies. Shortages of fertilizer and good quality seed in particular limited output. The fertilizer shortage, which has been very acute in recent years, had unusually marked effects in Germany whose prewar consumption of fertilizer per acre was exceeded only by that of the Low Countries.

Reports indicate that grain acreage and yields are up somewhat from last year, but production is estimated at less than 70 percent of the 1934-38 average. Due to a sharp increase in the acreage under potatoes and sugar beet, output of these crops will be closer to the prewar average than grains, at least in western Germany. Production of vegetables may reach near-record levels. The rapeseed crop, on the other hand, was badly damaged by insect infestation.

Livestock numbers, heavily reduced especially during the closing phases of the war, have apparently recovered somewhat. Meat and milk production are expected to show some increase over last year's low levels.

While total agricultural output is well below prewar, maintenance of the high wartime flour extraction rates and other shifts of crops from feed to food uses is expected to keep food output near the prewar average for food produced from domestic resources. Nevertheless large imports will be needed. Even before the war, western Germany was heavily dependent upon imported food and feed. Today, with the loss of food produced from imported feed and the population swelled by refugees and Germans expelled from neighboring countries, supplies for the nonfarm population will be much below bare subsistence levels unless substantial imports of food are received.

During 1945-46, around 2.5 million short tons of food, mostly grain and flour, were shipped into the three western zones, and considerable stocks were available at the beginning of the season. Yet only during a few months last winter could normal consumer rations in the British and American zones be raised to 1,550 calories daily, the level considered necessary if the average for the nonfarm population is to reach 2,000 calories in areas like western Germany where most foodstuffs are rationed and the black market is relatively limited in scope. Normal consumer rations had to be sharply reduced in March in the British zone, and in April in the American zone. Thereafter they fluctuated at levels much below 1,550 calories, as was also the case in the French and Russian zones. Tripartite nutrition surveys of the three western zones revealed a significant deterioration in the condition of German civilians as early as May, with famine edema reappearing in urban areas in serious proportions. By August the evidence of nutritional disorders had become more prevalent.

Late in September it was announced that normal consumer rations in the British and American zones were to be raised to 1,550 calories, effective October 16. As a result of the decision to integrate the food and agriculture programs in the British and American zones, indigenous and imported food are to be equally supplied and a uniform diet of rationed food is to be provided. If the 1,550 calorie level is to be maintained throughout the remainder of the 1946-47 consumption year, imports will have to be larger than actual shipments in 1945-46.

Austria

Domestic food production in Austria, it is tentatively estimated, will permit an average per capita daily intake of only 1,350 calories in 1946-47. This figure compares with domestically produced supplies of about 1,200 calories in 1945-46 and 2,150 calories in prewar days. Thus despite an improvement of about 12 percent over last year's food output the average Austrian would have to subsist on less than half of his prewar intake (2,850 calories) if restricted to home-grown foodstuffs. Last year's food imports, largely through the occupation force and in the latter part of the year also UNRRA, added about 550 calories to the per capita food supply. Imports during 1946-47 could be smaller to maintain 1945-46 consumption levels. Such levels, however, would be unsafe from a security and health point of view and inadequate for reconstruction.

The crop which has just been harvested was affected adversely by a severe spring drought. The eastern and most important agricultural areas suffered most. The drought was broken in the latter part of June by heavy downpours which caused some crop damage. However, with the exception of sugar beets, which were heavily infested by insects, crops came through the dry spell fairly well, winter grains faring better than spring planted grain. Potatoes and pulses gave good yields while sugar, feed beets, and oilseeds were below average. Fruit and vegetable output is well above last year's, and wine production will be at the highest level in many years. Pastures and meadows improved greatly, but the rain came too late to save the first hay crop, which was only one-fourth to one-third of normal. The severe shortage of hay for winter feeding is bound to affect unfavorably livestock numbers and the output of animal produce during the coming year. Shortages of most agricultural supplies, particularly fertilizers, persist, aggravated by the division of Austria into four zones and the presence of foreign troops as well as unfavorable price relationships for agricultural produce.

Food consumption of the nonfarm population has been and continues to be one of the lowest in Europe. Nonfarm intake averaged 1,800 calories daily in December 1945 (Vienna) and about 1,550 since early spring. A part of these calories are obtained from unrationed and black-marketed foods. "Normal consumers," representing roughly one-half of the total nonfarm population, are entitled to an official ration of only 1,200 calories. In Vienna and some of the smaller industrial centers, even these low rations were not always met. The Austrian Government hopes to be able to increase the normal consumer ration from 1,200 to 1,550 calories per day this fall.

Czechoslovakia

In the 1946-47 consumption year the indigenous food supply of Czechoslovakia measured in terms of calories per capita will be somewhat above the prewar level of 2,560 calories daily. This fortunate development is due to a reduction by about one-sixth of the population of Czechoslovakia within its present boundaries as well as to above

CZECHOSLOVAKIA: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1000 sh. tons	4,850	8,500	465	370	125
Production for food, " " "	2,150	2,675	465	370	120
Net trade for food 2/" " "	+355	-85	-55	+40	+30
Supplies for food:					
Total " " "	2,255/3	2,590	410	410	150
Per capita 4/, pounds	311/3	357	57	57	21
Per capita in % of prewar 5/	107/3	111	123	77	65
1946-47					
Total production, 1000 sh. tons	5,000	7,880	530	385	130
Production for food:					
Total " " "	2,350	2,480	530	385	125
Per capita 4/, pounds	317/6	397	85	62	20

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat and excluding slaughter fats.
2/ Net imports +; net exports -. Grain includes flour in terms of grain.
3/ In terms of flour. Extraction rates: average of all grains 90% in 1945-46 and 73% in prewar.
4/ Estimated population 14.5 million 1945 and 12.5 million 1946 as compared with 15.1 million prewar (1936) within 1937 boundaries.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: 85% for the average of all grains.

average growing conditions during the past crop season. Retention of certain wartime controls on crop utilization and milling rates, though in a somewhat milder form, is also expected to contribute to the increase in food output as compared with the prewar average.

Czechoslovakian agriculture suffered comparatively little from the war. Though a shortage of fertilizers persists, the country has ample draft power. Labor is short because of the expulsion of German and Hungarian nationals. To counteract the labor shortage the government has drafted youth and labor into agriculture and contracted for Bulgarian farm hands. Thus they succeeded in planting about 90 percent of the arable land and obtained yields averaging about 10-15 percent below prewar levels.

After an early spring dryness during March and April, which caused some concern about the crop outlook, rains and ideal growing and harvesting weather resulted in crops somewhat larger than last year's, which also had been grown under particularly favorable conditions. The country will thus be able to export large quantities of sugar, potatoes, hops and malt and to allocate a larger portion of barley to the brewing industry. Vegetables have been so plentiful that some were exported, and fruits are in fairly adequate supply. Wine and grapes are sufficient to cover consumption needs.

Feedstuffs too are more plentiful permitting an increase in the number of cattle. There is a large number of calves on hand so that the government could abolish the prohibition on the slaughtering of calves. Pork will be more ample though still short. Milk production and deliveries are expected to be high. However, as is indicated in the accompanying table, Czechoslovakia must rely on imports if fat consumption is to improve.

"There was and there will be no food crisis in this country." These are the recent words of the Minister of Food. In fact, average consumption of the nonfarm population held up well throughout the 1945-46 consumption year. In the fall of 1945 nonfarm food intake averaged 2,150 calories and increased steadily since the early part of 1946 to an estimated 2,225 calories in April and 2,400 in June and July. Not only were bread, meat, milk, sugar, and many other rations increased but also such important foods as potatoes, vegetables, and fruits were taken off rationing altogether. Substantial UNRRA and commercial imports added 270 calories to the per capita supply of the whole population or over 400 calories for the nonfarm consumers. Food exports amounted to about 50 calories per capita.

Italy

Italian farm output in 1946 will show a marked increase over the 1945 level. Whereas last year agriculture suffered not only from active warfare and the disorganization consequent upon military operations but also from a severe drought, this year farming operations have been relatively undisturbed and the weather has been generally favorable. Some easing of the shortage of fertilizer and other farm supplies also contributed to the improvement in acreage and yields.

Preliminary estimates for grain in 1946 put acreage at over 90 percent and production at around 85 percent of the 1933-37 average. The sugar-beet harvest, which fell to extraordinarily low levels in 1945, is forecast at 90 percent of the prewar average for 1946. Production of potatoes, other vegetables, and fruit is expected to be better than average. Recent reports, however, state that the olive crop has been damaged by winds and lack of rain.

The livestock and feed situation has apparently also improved. Such information as is available indicates that livestock numbers were well maintained during 1945-46. Feed grain supplies will be larger in 1946-47 than in the preceding year, and a good hay crop has been gathered. Both meat and milk yields are expected to show some recovery.

ITALY: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1,000 sh. tons	8,200	1,760	20	625	260
Production for food, " " "	6,000	950	20	625	240
Net trade for food 2/" " "	+1,900	-	+80	+5	+25
Supplies for food:					
Total " " "	7,200/3	950	100	630	265
Per capita 4/, pounds	316/3	42	4	28	12
Per capita in % of prewar 5/	84/3	50	28	64	47
1946-47					
Total production, 1,000 sh. tons	11,230	3,400	300	690	350
Production for food:					
Total " " "	8,160	2,200	300	690	330
Per capita 4/, pounds	307/6	96	13	30	14

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and rabbit meat, and excluding slaughter fats.
2/ Net imports +; net exports -. Including flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat and corn 90%, rye and barley 83%, rice 68%, oats 60%. Allowance has been made for decrease in stocks.
4/ Estimated population 45.5 million 1945 and 45.7 million 1946 as compared with 42.6 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: wheat and rye 87.5%, other grains as in footnote 3.

If the increase in farm output is not accompanied by any appreciable reduction in the high flour extraction rates of 1945-46 or in the large proportion of grain used for human consumption, production for food in 1946-47 may be estimated at nearly 90 percent of the average for 1933-37. On a per capita basis, however, indigenous supplies will provide only 1,900-2,000 calories per person per day, or 85 percent of the prewar average.

With production at the estimated level, Italy could be self-sufficient in food at the calorie levels prevailing in 1945-46. This would mean, as may be seen from the accompanying table, that an increase in consumption of potatoes, sugar, meat, and fats would be offset by a decrease in the consumption of flour.

The table also shows, however, how greatly consumption of all these foods, including even flour, was restricted in 1945-46. Tentative estimates indicate that the energy intake (excluding alcoholic beverages) for the whole population in that year averaged around 1,900 calories, as compared with 2,550 calories during the period 1933-37. The annual average for the nonfarm population was probably no more than 1,600 calories, and a large part of these calories, coming from locally-rationed, unrationed, and black-marketed foods, were unequally distributed. Nation-wide rations, which included only bread, alimentary pastes and rice, sugar, and fat, provided about 900 calories daily in the fall of 1945 and only 700 calories in the spring of 1946.

During the summer the energy value of normal consumer rations was raised to over 1,000 calories daily by increasing the bread, alimentary paste-rice, and sugar rations. In order to maintain these rations throughout 1946-47, Italy will need large grain imports, though import requirements should be considerably less than actual shipments in 1945-46, especially if grain collections reach the goals established. Sugar imports, however, should not be necessary.

Spain

After one of the worst harvests in years in 1945, due to a severe drought, Spain in 1946 is having the best harvest since the end of its Civil War. The drought broke in the fall of 1945 in time for seeding operations. Weather conditions since then have been generally favorable, though rains and low temperatures in late spring and early summer caused some damage.

Tentative estimates for 1946 grain production, at 85 percent of the 1931-35 average, are two-thirds higher than estimates for 1945. An olive oil output far larger than last year and close to, if not above, the pre-Civil War average, is in prospect. Sharp increases from the 1945 level are also expected for most other major crops except chick-peas, which were severely attacked by a fungus disease. The outlook for citrus fruit has been affected by a hard freeze in January, which not only destroyed a large part of the citrus crop, but ruined many groves.

Prospects of an increase in the output of livestock products, on the other hand, are not very favorable. Scarcity of feed is said to have caused a considerable reduction in livestock numbers in 1945-46. With relatively abundant feed supplies in the coming months, some building up of herds will be possible and may reduce meat production. Milk yields are expected to improve.

Feed supplies may be increased not only as a result of larger feed crops but also by a relaxation of the regulations on their use, though a return to the pre-Civil War pattern of crop utilization is not likely. Assuming some relaxation of these regulations, but allowing for a high flour extraction rate and other shifts from feed to food uses as compared with pre-Civil War times, production for food in 1946-47, in terms of calories, is tentatively estimated at 2,300-2,400 calories per capita per day, or about 85 percent of the 1931-35 average.

SPAIN (excluding the Canary Islands): Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1,000 sh. tons	4,950	4,000	135	615	290
Production for food, " " "	2,860	1,950	135	615	230
Net trade for food 2/" " "	+660	-	+30	-	+5
Supplies for food:					
Total " " "	3,300/3	1,975	165	615	235
Per capita 4/, pounds	251/3	150	13	47	18
Per capita in % of prewar 5/	79/3	72	47	79	52
1946-47					
Total production, 1,000 sh. tons	8,430	4,960	220	600	525
Production for food:					
Total " " "	4,400	2,425	220	600	460
Per capita 4/, pounds	292/6	183	17	45	35

Office of Foreign Agricultural Relations - Revised as of October 1946.
Data partly based on official sources, partly estimated.

1/ Including poultry and excluding slaughter fats.
2/ Net imports +; net exports -. Grain includes flour in terms of grain.
3/ In terms of flour. Extraction rates: wheat and rye 95%, corn 90%, rice 65%, oats 60%, others 80%. Allowance has been made for a decrease in stocks.
4/ Estimated population 26.3 million 1945 and 26.5 million 1946 as compared with 23.7 million pre-Civil War.
5/ Average 1931-32 to 1935-36.
6/ In terms of flour. Extraction rates assumed: 90% for wheat and rye, other grains as in footnote 3.

Indigenous food supplies at the estimated levels would more than satisfy consumption requirements at the 1945-46 rate, as is indicated in the accompanying table. But consumption in 1945-46 was unusually low. Preliminary estimates of average per capita intake (excluding alcoholic beverages) in that year come to only around 2,000 calories daily for the entire population, and to considerably less for the nonfarm population. Rations were very small, and even these were not always available.

Some recovery in consumption is bound to take place in 1946-47. Bread rations for normal consumers have already been raised from 150 grams to 250 grams daily. Olive oil rations, down to one-eighth of a liter every two weeks this summer, will undoubtedly be raised when supplies from the new olive crop become available sometime after October. If present expectations as to olive oil production are realized, a limited quantity may be made available for export. But since output of most commodities will not suffice to maintain pre-Civil War consumption levels, and since difficulties in collecting indigenous supplies for legal distribution will probably continue, Spain is more likely to seek imports of staple foods than to permit their export.

Portugal

The 1946 crop output in Portugal is generally considered to be better than any in the past ten years and is far larger than the output in 1945, when agriculture was hit by a severe drought. This year, weather conditions were favorable through most of the growing season. Harvesting, though, was somewhat delayed. Rainfall during the latter part of August proved helpful to such late crops as rice, beans, potatoes, grapes, and olives.

Wheat production, the most important item in the Portuguese food economy, is estimated at around 550,000 short tons as compared with only 330,000 short tons in 1945 and an average of 520,000 for the five years 1933-37. Corn, the second most important food crop, is late this year, and a larger share than expected may be good only for use as green fodder. Olive and wine production are about average and rice, fruits, and nuts above average. The improved feed grain position and good pastures will permit a recovery in livestock numbers and animal produce, which were adversely affected by the severe drought in 1945.

Despite the increase in production, Portugal will have to import some grain and other foodstuffs in order to maintain per capita 1945-46 consumption levels. Tentative estimates indicate that locally-produced supplies in 1946-47 will provide an average of 1,900 calories daily for the total population and considerably less for the urban population. Last fall the energy intake for Lisbon's population averaged around 1,900 calories and this spring a little less than 1,800 calories. A large proportion of these calories came from unrationed and black-marketed food. Rationed foodstuffs for the normal consumer provided 1,200 calories in the fall of 1945 and only 1,075 calories in the spring of 1946.

Greece

The general food situation in Greece has shown considerable improvement over last year. This year's total food supply from indigenous production should allow about 1,700 calories per capita as against about 1,250 calories last year. More favorable economic conditions, excellent weather for fall-sown crops, and generous UNRRA aid are mainly responsible for this showing.

From a grain acreage of about 85 percent of the prewar acreage, a production equal or above prewar, except for corn, is estimated. The wheat crop was especially large, being estimated at about 940,000 short tons against 785,000 short tons of prewar (1933-37 average) and 496,000 short tons last year. This large wheat crop is a very favorable factor in the food supply for 1946-47, considering the planned discontinuance of UNRRA by the end of this year and the fact that Greece normally imports about 40 percent of her bread grain requirements. Other crops, too, show a considerable increase over last year, and in some cases are up to prewar levels or above.

Compared to last year, the livestock situation shows definite signs of improvement. Feed supplies from indigenous production are more plentiful, and pastures are in better condition. Unless the late drought did extensive damage to the corn crop, no appreciable imports of feedstuffs should be necessary as livestock numbers are still greatly below prewar. Cattle numbers are only 50 percent of prewar, goats about 60 percent, and sheep about 75 percent. Consequently, meat and milk production are still considerably below prewar, but above last year's production.

Despite the increase in production for food in 1946-47, Greece will need to import considerable quantities of grain, sugar, and meat to maintain the 1945-46 consumption levels, as may be seen from the accompanying table. The deficit indicated for fats might well disappear if account could be taken of invisible stocks. Though visible supplies are below prewar levels, it is possible that small amounts of olive oil will be available for export. Any such exports, however, will probably have to be offset later by the importation of other fats and oils. The only foodstuffs which Greece can make available for export in any significant quantity are likely to be fresh and dried fruits.

Average per capita consumption in Greece in 1945-46 is tentatively estimated at around 2,200 calories per person per day, as compared with 2,500 calories before the war. Nearly 45 percent of the 2,200 calories were obtained from imports, practically all of which were shipped in by UNRRA. Consumption in the first part of the season was at considerably higher levels than in the latter part. In the fall of 1945 the intake for the nonfarm population averaged 2,100-2,200 calories and in the spring of 1946 only 1,800-1,900 calories. These averages covered marked regional variations, the intake varying with locally-produced foodstuffs and distribution of UNRRA supplies.

During the summer of 1946, the food situation again improved, and by now intake may be higher than last fall. With the termination of UNRRA by the end of this year, however, Greece will have to find another way to import necessary food supplies. Apparently conscious of the difficulty of securing imports, the government has instituted a grain collection scheme in the surplus-producing areas aimed at collecting all surplus grain for stockpile. In other respects government plans for full utilization of indigenous food supplies have not yet been completed.

GREECE: Tentative estimate of supplies in 1945-46 and production in 1946-47 of principal foods

Year	Grain	Potatoes	Sugar, refined	Meats 1/ (carcass weight)	Fats (fat content)
1945-46					
Total production, 1,000 sh. tons	900	130	-	90	125
Production for food " " "	500	90	-	90	115
Net trade for food 2/" " "	+800	-	+45	+25	+7
Supplies for food:					
Total " " "	1,145/3	90	45	115	122
Per capita 4/, pounds	316/3	25	12	32	34
Per capita in % of prewar 5/	102/3	79	62	78	86
1946-47					
Total production, 1,000 sh. tons	1,560	170	-	95	120
Production for food:					
Total " " "	1,000	125	-	95	110
Per capita 4/, pounds	235/6	33	-	25	29

Office of Foreign Agricultural Relations - Revised as of October 1946. Data partly based on official sources, partly estimated.

1/ Including poultry and excluding slaughter fats.
2/ Net imports +; net exports -. Grain includes flour in terms of grain.
3/ In terms of flour. Extraction rates: 90% for wheat, corn, rye, and maslin; oats 70%; barley 75%. No allowance has been made for possible changes in stocks.
4/ Estimated population 7.25 million 1945 and 7.5 million 1946 as compared with 6.8 million prewar.
5/ Average 1933-34 to 1937-38.
6/ In terms of flour. Extraction rates assumed: 90% for wheat, maslin, and rye, 60% for barley, 75% for corn.

Hungary

The food situation has improved somewhat since the spring and summer months, particularly for the urban population. Rations to urban consumers, which supplied only 400 calories to the "average" consumer in July, are for the present being raised to 1100 calories. Moreover, the more settled economic conditions, as well as the greater availability of consumer goods to peasants, is expected to bring more food for the free market in the urban centers.

This year's harvest is a little above last year's, and is expected to yield about 2500 calories per person, whereas before the war consumption totaled about 2800 calories and large quantities of food products were exported. The 2500 calorie level does not allow for reparation shipments of food, the feeding of occupation troops, nor possible exports. It can also be assumed that the urban population will actually receive much less, while many peasants will consume at prewar rate or above. Thus the urban millions face another year of severe food shortages. Only an equitable distribution of food supplies, the heavy utilization of corn for food and the continuance of high extraction rates will ease their ssituation.

The severe late summer drought was mainly responsible for the lower than anticipated over-all food production as yields were from 30 to 50 percent below average for most crops. Poor seed-bed preparations and improper cultivation (mainly due to severe lack of draft-power and machinery), poor quality of seed, lack of plant food from either manure or artificial fertilizers, were also responsible for this poor showing. Other factors retarding the recovery of food production are the very serious damage suffered during the last months of the war by its transportation and distribution systems; lack of manpower, especially skilled managers; and a recently consummated land reform, which caused many as yet unsettled problems relating to production and management.

The total grain acreage this year was about 11 percent below prewar, but the production is expected to be only about 55 percent of that level, or about the same as last year. While this year the wheat crop is expected to yield some 1,100,000 s.t. as against 700,000 s.t. last year and 2,400,000 s.t. prewar, the corn crop is expected to be only 1,800,000 s.t. compared to about 2,100,000 last year and 2,500,000 s.t. prewar. Rye production is about the same as last year, around 300,000 s.t. These shifts in production should result in some improvement in the quality of the bread because of the larger quantity of wheat available. However, this improvement will depend to a great extent on the ability of the Government to collect bread grains from the peasants, as well as the substitution of corn for wheat for the major part of the 110,000 s.t. of wheat due the USSR on reparations account.

Potato production is expected to be about 1,600,000 short tons, or 10 percent below last year and about 30 percent below prewar.

Sugar-beet production is expected to be about 440,000 short tons, considerably above last year's extremely poor crop, but less than half of prewar. Dry legume production is expected to be around 100,000 short tons or just about prewar level.

Animal protein foods will continue to be extremely scarce, especially to the urban consumers. Livestock numbers are still greatly below prewar, and dry pastures as well as an extremely poor fodder-beet crop are not helping rehabilitation. It is estimated that hog numbers by the end of this calendar year will be only about 40 percent of prewar. Other classes of livestock also have been sharply reduced, hence total meat and milk production is expected to be less than half of prewar, but somewhat above last year's.

Only slight improvement is expected in the fats and oils picture. Sunflower seeds were the main hope to supply the desperately needed oil, but the drought reduced production considerably. Even so, about 55,000 short tons of vegetable oil can be expected, considerably above prewar and better than last year. But even so, with the expected very low animal fat production, there will probably not be enough fats and oils available to honor the very low rations of the urban population for the year.

The very small UNRRA program is coming to an end, and with the possible exception of some further Swiss aid to urban children, no outside help is in prospect.

Reparations and occupying troops, though the latter have been greatly reduced, will continue to be a drain on scant indigenous food supplies. There is no likelihood of any large trade in agricultural products. Barter deals with neighboring countries and the USSR can be expected, and some exports to western countries in return for other vitally needed foodstuffs or other goods will be consummated. Fruit pulp, wine, vegetables, poultry products, and possibly some corn will be the main export items, while animal protein foods, breeding stock, seeds and foods not locally produced will be imported, depending on the trade agreements and foreign exchange available.

Rumania

Because of a severe drought, the food situation in Rumania has not improved materially with the 1946 harvest, especially for the urban population and the people living in the 15 eastern judets (counties) where the drought was most serious. The Government, fearful that the supply of cereals will not last until the next harvest, has just taken the following steps: reestablished rations of 300 grams per day; decreed 90 percent extraction rates; prohibited the baking of white bread, and has set aside funds to finance foreign purchases of grain.

The drought came in two stages. The first occurred in the spring, affecting mainly the 15 eastern judets and damaging the small grains seriously. The second, lasting from July to the end of August, affected practically the whole country. Corn, potatoes, sunflowers, sugar beets, fodder crops, and pastures suffered heavily from this second drought.

Total wheat production is somewhat above last year's, largely because of an expansion in acreage planted of about 20 percent. In the drought-stricken eastern areas, the yield for winter wheat is estimated to be only 3.9 bushels per acre, compared to a prewar Rumanian yield of 16.3 bushels per acre. Corn, on the other hand, suffered severely all over the country and is expected to be below last year's small crop. Since corn is the most important food and feed crop, peasants who may have a surplus of wheat are unwilling to part with it, even at black-market prices, because they do not see any corn supplies.

It is estimated that about 550,000 - 1,100,000 short tons of corn would need to be imported this year to supply the minimum food and feed needs of the country.

The livestock picture is equally unfavorable. All sorts of measures are being taken to relieve the feed shortage, including the cutting of marsh grass, the preservation of tree leaves and the rationing of feed supplies. Even so, heavy slaughtering is reported and the USSR has been asked to accept more livestock on the 1946 reparations account in order to make use of these excess animals.

The food and feed situation in the eastern areas is causing people to migrate to other districts of the country in an effort to find food for themselves and pastures for their few remaining animals.

Arrangements have not yet been made to secure all of the necessary grain imports. Some small shipments have reached the country from neighboring countries so far, and the Russians have released some corn from their stocks in Yugoslavia, but the bulk of the supplies will have to come from elsewhere. Since reparations and occupying troops will cut further into the tight indigenous food supplies, Russia has been requested to relax reparation shipments of grain or allow substitution.

Bulgaria

Bulgaria's food situation is relatively satisfactory for 1946-47 in spite of the late summer drought this year. Total per capita bread grain supplies are above prewar if one-third of the small corn crop is utilized as food and if the high extraction rates used last year are continued throughout this year; but exports are unlikely because of the short supply of many other foods, notably livestock products and the amounts needed to supply the occupation troops. Total indigenous production may allow an average per capita consumption level of about 2,700 calories per day, compared to about 2,750 prewar. Few food imports will be made.

Because of the drought and the generally low agricultural production last year, Bulgaria has no carry-over stocks and is entirely dependent on the current harvest for this year's food supply. Bulgaria came through the war in much better shape agriculturally than most of her neighbors, though there are still considerable numbers of Russian troops stationed there. After last year's unsettled condition, the country has by now solved most of its problems relative to the production and distribution of food products. An acreage close to prewar was planted, and had it not been for the severe late summer drought, nearly all of this year's crops would have been close to, if not above, prewar levels. Even so, the fall-sown crops were above prewar, with wheat production over 20 percent above 1933-37 average and over 60 percent above last year's. On the other hand, corn is expected to be only 50 percent of prewar, though double last year's extremely poor crop. Potatoes, sunflower and sugar beets are other crops hard hit by the drought. Potatoes are expected to yield only 40 percent of prewar, one-third below last year's crop.

The livestock picture, with the exception of sheep, is not too bad, compared to neighboring countries. Though reduction in numbers caused by the war was further accentuated by forced slaughter as a result of last year's drought and by requisitioning for occupation troops, a closer approach to prewar numbers is expected this year.

In spite of the heavy slaughtering, meat production was considerably below prewar in 1945-46, but a greater output is expected this year. Dairy products are also in short supply. The reduction in milk animals and the even greater reduction in yields per animal are responsible for the shortages. An improvement in these supplies may be expected, though the late drought is again retarding recovery.

Fats and oils are similarly short. The drought has, like last year, reduced the sunflower seed yield to such an extent that the plan to substitute oils for animal fats will not materialize, and a total production of fats and oils considerably below normal requirement is to be expected.

Sugarbeets also have suffered heavily from the drought, resulting in an expected sugar output below the amount needed to honor even the relatively low rations in effect.

Apart from breadgrains, the only other foods in good supply have been fruits and vegetables. Much fruit has been quick-frozen and is available for export at the present time. This fruit, together with tobacco and some specialty crops, such as rose oil, are the most important agricultural products Bulgaria will be able to trade for needed imports. But it is not expected that many food items will be imported during the present consumption year, possibly some animal protein foods, sugar and such items, which are not produced locally.

Yugoslavia

The food situation, from all indications, has greatly improved compared to last year, both because of increased indigenous production and UNRRA supplies. Production of fall-sown crops was considerably above last year, but a late summer drought caused serious deterioration of corn and other spring-sown crops. This year, though, the drought hit mostly the surplus producing areas, thus leaving the deficit areas in relatively better position; this is especially important in view of the transportation difficulties to be overcome in moving food from surplus to deficit producing areas.

In addition to more favorable over-all weather conditions, food production was increased over 1945-46 because of UNRRA aid in supplying farm machinery, draft power and other vital materials, the improved economic organization in general, the planting this year of large areas, especially in the Vojvodina, which were left practically unplanted last year, and the traditional desire of the Balkan peasant to farm his land in spite of all difficulties.

On the other hand, such factors as the drought; the still rather unsettled economic conditions, especially the lack of consumer goods; the shift from private to government operations; shortage of labor, machinery and draft power; short seed supplies and lack of know-how in some areas have retarded the recovery of agricultural production.

Except for corn and oats, the grain harvest has been good, even allowing for the increased acreage. Total output was considerably above last year's, and in the case of wheat very close to prewar. It seems that, with a reduced amount of grain going into feed, there should be an adequate food supply available. As proof of this, the extraction rate for bread has been reported reduced to 80 percent in several areas.

As for the other items, they are all in better supply than last year, but, because of the greatly reduced animal numbers, output of livestock products is considerably below prewar and will continue in short supply, especially with the discontinuance of UNRRA operations.

Though there will be shortages, a carryover of certain UNRRA supplies, together with the indigenous supplies, should see the Yugoslav people through until the next harvest on a reasonably high consumption level. Available information on indigenous production indicates that it may yield about 2500 calories on an average per capita basis, compared to last year's 2250 and a prewar consumption level of about 2850.

There should be scarcely anything available for export outside of some special items, such as fruit pulps and jams. Imports of certain foods, especially those not produced locally, will depend on foreign exchange available.

Albania

Favorable weather conditions, UNRRA aid, and generally more stabilized economic and political conditions have resulted in a marked increase in the food production during 1946. With the discontinuance of UNRRA aid at the end of this year, some items not produced locally, such as sugar, may be in short supply. But there should be enough other food to supply the population, if equitably distributed, at about their prewar level.

Acreage of grains, potatoes and pulses were reported at about prewar levels or above, while production actually is estimated above prewar for bread grains and potatoes.

Livestock numbers too are close to normal. Sheep and goat numbers are estimated to be above prewar, but poultry, cattle and horse numbers are still assumed to be somewhat below that level. Should government regulations restricting slaughter be effective, prewar numbers would be reached in a relatively short time in these classes also. Livestock products too are estimated to be in sufficient overall supply, if exports are kept to a minimum; but, as with other products, many local shortages may occur because of limited distribution facilities. Fish production is still greatly below prewar, and its rehabilitation will depend on the arrival of scheduled fishing equipment through UNRRA.

Though this year is supposed to be a "low" olive year, indigenous olive oil production, together with stocks carried over from last year, should provide for average consumption requirements.

SOVIET UNION

Food production in the Soviet Union will be greater in 1946-47 than last year, despite unfavorable weather conditions in some regions. But it will still be well below the prewar level, especially in the war devastated regions. Rationing of foodstuffs is continuing with wartime severity and the cost of rationed food to the consumer has risen very steeply. Only bread is fully available on rations. Other products are often not available or substitutes are used. The Soviet Union is not expected to export large quantities of grain and will continue to be on an import basis for fats and meat products.

Weather conditions in different sections of the Soviet Union showed considerable variation during the 1946-47 growing season, and the harvest has been rather spotted. Dry hot weather prevailed in the spring and early summer in many southern and central regions of the Soviet Union. Yields in Southern Ukraine and the adjacent districts of former Bessarabia were considerably reduced by the drought. Other areas of the Ukraine and central Russia were less severely affected. Spring grains--barley, oats, and corn--suffered more than the winter grains--rye, and wheat. Wheat is for the most part winter grown in the drought area.

An exception among spring grains in the drought area is millet, concerning which there were favorable reports. Millet is a good drought resistant crop, has a long planting season, requires little seed, and, therefore, lends itself easily to expansion in dry years. In the Ukraine this year the official goal for millet was over 1,800,000 acres compared to less than 1,100,000 in 1938.

The grain yields outside of the southern and central regions are relatively good or satisfactory. This area includes such important regions as a large part of the North Caucasus, the spring wheat belt of Ural, Siberia, and Kazakhstan, as well as the western part of the Soviet Union.

Because of relatively good yields in these regions, a somewhat larger acreage under grains, and generally better harvesting weather than last year, the overall barn out-turn of grains is expected to exceed that of 1945, when heavy crop losses occurred during the harvest season. The quality of the grain too is generally better than last year. The larger production is in the principal bread grains, wheat and rye, which more than offset the small reduction in other grains. Wheat and rye fared better than other grains because their yields were less depressed in the drought area and were good in other regions, including a large part of the spring wheat belt.

The geographical distribution of this year's crop, however, is not a favorable one because relatively good yields are largely concentrated in the eastern regions and light yields in the southern and central regions. In the east the harvest season arrives late and is short. Rains interfere with the harvest, as is the case during the current year, and much of the cut grain has to be dried. There are also, as a rule, shipping difficulties.

The unsatisfactory geographical distribution may have been a factor in the government decision to continue rationing of breadstuffs, which earlier in the year was scheduled to be abandoned in 1946. The desire to accumulate a more ample supply of grain prior to derationing, which action most likely would cause an increased demand for grains, probably also played an important role in this decision announced at the end of August, and attributed to "the drought in some provinces of the U.S.S.R. and reduction of state food reserves." Bread rations for some categories were actually reduced. Under the circumstances, it is not expected that the Soviet Union will be exporting grain on a large scale, though the possibility of some shipments, like those to France earlier in the year, cannot be ruled out if the Government deems it advisable.

The fats situation will remain tight in the Soviet Union. Some increase occurred in the oilseed acreage, but the yields in the principal producing regions were low and delayed harvesting probably resulted in considerable crop losses. A trade agreement concluded with Denmark provided for importation by the Soviet Union between July 1, 1946, and December 31, 1947, of [illegible] 15,000 metric tons (33,000,000 pounds) of butter and also of some meat and dairy products. These quantities may be increased in return for corresponding deliveries by the Soviet Union to Denmark of oil cake and grain. The importation of the stipulated quantity of Danish butter, unless supplemented by other imports will be more than offset by the cessation of UNRRA shipments in 1947.

The out-turn of potatoes and vegetables is expected to be larger for the country as a whole than in 1945. The poor outlook in the central regions in the midsummer improved considerably with abundant rains in August alternating with warm days. But in the Ukraine and former Bessarabia the yields are considerably lower in 1946 than in 1945.

The sugar beet crop was affected adversely by weather conditions in the principal regions, which were said to have been the worst in 10 to 15 years. Due to low yields of sugar beets, the planned increase of sugar output is problematical, despite considerable recovery of the sugar refining industry, which suffered severely during the war.

As a preliminary to derationing scheduled for 1947, and a return to a single price system, prices of rationed commodities have been more than doubled or trebled (See table). The price of black bread, the most important article of Russian diet more than trebled. At the same time the much higher prices in Government commercial stores, where ration coupons are not required, were reduced from 27 to 53 percent, but discounts to special groups were abolished. To compensate for increased ration prices, wages were increased for those receiving 900 rubles and less a month.1/ These increases range from 110 rubles for those receiving wages of 300 rubles or less per month to 80 rubles for those receiving over 700 and up to 900 rubles. There is no increase for those earning over 900 rubles. The increases thus range from a half to a third of earnings in the lowest brackets (those receiving 300 rubles and less) to less than a tenth in the highest brackets affected.2/

SOVIET UNION: Prices of rationed foodstuffs,
before and after increase on September 16,
1946.

Foodstuff	Pre-increase prices	New prices
	Rubles per kilogram 1/	Rubles per kilogram 1/
Black bread	1	3.4
White bread	3.8	11
Flour	4.6	13
Farina.	4.5	14
Rice.	6.5	19
Macareni.	5	15
Beef.	12	28
Mutton.	14	34
Pork.	14	48
Sausage	19	48
Lump sugar.	5	15
Granulated sugar.	5	13.5
Candy	8	23

1/ The official exchange rate of the ruble has been fixed at 18.9 cents United States currency. The so-called "diplomatic" rate is 8 1/3 cents. Neither of these rates represents the true purchasing power of the ruble, or reflects its depreciation during the war.

2/ The average monthly earnings of all workers and employees in the Soviet Union including those in the highest brackets were 289 rubles in 1938 and 338 rubles in 1940. The new 5-year plan law specifies a monthly figure of 500 rubles in 1950. The average earnings before the recent increase went into effect were probably around 400 rubles.

The gap between the reduced commercial prices (and the free market prices which follow commercial prices) and the rationed prices is still very wide. The price of beef, for instance, was reduced in the commercial stores from 140 to 90 rubles per kilogram (2.2 pounds). In the rationed stores the price of beef, when available was increased from 12 to 28 rubles. Sugar similarly was reduced in commercial stores from 140 to 70 rubles and increased from 5 to 15 rubles in rationed stores. Thus the commercial and free market prices are still out of the reach of the average consumer. He must rely primarily on his ration, the cost of which almost trebled while his wages have not increased to anything like the same extent.

SOVIET UNION: Official food rations in Moscow, October 1946.

RATION Category	Bread per day grams	Grits per month grams	Meat per month grams	Fats per month grams	Sugar per month grams
Manual workers in heavy industry	650	2,000	2,200	800	900
Other manual workers	550	2,000	2,200	800	900
Office workers	450	1,500	1,200	400	500
Dependents aged 12 years or over	250	1,000	600	200	400
Children under 12 years of age.	300 1/	1,200	600	400	500
	Pounds	Pounds	Pounds	Pounds	Pounds
Manual workers in heavy industry	1.4	4.4	4.9	1.8	2.0
Other manual workers	1.2	4.4	4.9	1.8	2.0
Office workers	1.0	3.3	2.6	0.9	1.1
Dependents aged 12 years or over	0.6	2.2	1.3	0.4	0.9
Children under 12 years of age	0.7	2.6	1.5	0.9	1.1

1/ School children in the eighth, ninth and tenth grades receive 400 grams per day.

FRENCH NORTH AFRICA

Production in French North Africa will be far larger in 1946-47 than in 1945-46, when drought reduced output to unusually low levels. This year weather conditions have been favorable. The increase in yields, however, was partly offset by a decline in sown acreages, due mainly to drought-caused shortages of draft power and seed, especially barley.

According to the latest official estimates, acreage under wheat and barley, the two main food crops, dropped in 1946 to 67 percent of the average for 1933-37, whereas production rose to 76 percent of the same average. While the official production estimate of 3.4 million short tons of wheat and barley is undoubtedly too low, it is probably comparable with the official estimate of 1 million short tons for 1945. Since French North Africa received about 2 million short tons of food grains from overseas in 1945-46, consumption requirements equal to last season's could be covered by domestic production alone during 1946-47. But without imports, per capita supplies would amount to only 330 pounds as compared with an average of 467 pounds in the period 1933-34 to 1937-38.

Olive oil production is also expected to be above the low 1945-46 level. However, recent reports indicate that output will be well below the average in prewar times when the region, with a much smaller population than at present, was barely self-sufficient in vegetable oils.

In contrast to most crops, output of livestock products may be smaller in 1946-47 than in 1945-46, when an acute shortage of feed caused abnormally heavy slaughterings as well as high mortality rates. Since livestock numbers increased during the war years, they may not be much below prewar levels at present. Nevertheless, without a substantial improvement in economic conditions, sales of meat animals for legal consumption at home and for export are not likely to reach the prewar average.

With the expected increase in domestically-produced food supplies, import requirements will be much below actual imports in 1945-46. However, as output will not suffice to maintain prewar consumption levels, French North Africa will hardly be in a position to resume its prewar status as a net exporter of food. Some wheat has been shipped to France, but these shipments were to be returned during the fall. For the season 1946-47 as a whole, net imports of grain and vegetable oils are more likely than net exports, while sugar requirements, as always, must be imported. Substantial quantities of fruits, vegetables, and wine, however, should be available for export.

MIDDLE EAST

Summary

Current estimates of agricultural production in the Middle Eastern countries indicate that food supplies will be ample for domestic needs during 1946-47 and also will provide substantial exportable surpluses. Weather conditions, especially timely rains during the critical spring months, were ideal for the growing of crops and pastures. There will be some shortage of bread grains in Egypt, but this will be offset by exportable surpluses of rice, sugar and onions. Turkey's production of food crops in 1946 reached record levels, making available unusually large surpluses of grains, livestock and dried fruits. Iran will be able to take care of its needs and offer grain and dried fruits for export. Iraq too will offer substantial exports of grain and dates. Syria and Lebanon, taken together, will have some surplus of foodstuffs. As usual, Saudi Arabia and Palestine will have to make heavy imports of foodstuffs. However, the needs of these two countries are relatively small as compared with the rest of the region and its surplus production.

Egypt

Estimates of food crops, most of which have already been harvested, indicate that, with the exception of some deficit of bread grains, Egypt will have ample food supplies until the coming harvests in the summer of 1947.

Two factors were responsible for some reduction in the production of bread grains, the abnormal flood of the Nile during August and September and the increase in the areas planted to cotton. As compared with last year, the decrease in the production of wheat, barley, corn and grain sorghum is estimated at some 300,000 tons. However, there are unusually large carryover stocks of wheat and corn, and the rice crop will give a substantial surplus for export, amounting to some 150,000 tons of cleaned rice.

Cottonseed oil, by far the most important vegetable oil in Egypt, is in ample supply from local production and from imported cottonseed from the Sudan. It is expected that in the near future cotton production, which was heavily curtailed during the war, will reach the high prewar level, and Egypt will again become an exporter of surplus vegetable oil.

An exportable surplus of sugar is expected again this year, amounting to about 15,000 tons.

Dry legumes, which constitute an important item of diet, are expected to be sufficient for the country's needs.

Turkey

Agricultural production in Turkey in 1946 is estimated to be one of the highest in recent years. Weather conditions since the fall of 1945 have been excellent for planting, growing and harvesting. There were no periods of severe cold or drought. Rain was abundant and well distributed, especially during the critical spring months. Consequently, it seems certain that Turkey is entering upon a year of ample food supplies, sufficient to meet its needs and to leave substantial exportable surpluses.

Livestock, mainly sheep and goats, which is an important source of food, is in excellent condition. Substantial livestock exports have been made to neighboring countries, and are likely to continue in 1946-47.

Estimates of the major grain crops indicate that production in 1946 was much higher than that of last year and may possibly have reached record levels. Wheat production is estimated at the all-time record of 5 million tons, compared with a normal production of about 3.5 million tons. It seems certain, therefore, that Turkey will be in a position to offer substantial quantities of grain for export, possibly about 1 million tons, if the unusually high wheat production is verified in final estimates.

Production of dried fruits (figs and raisins) is above average, with a possible exportable surplus of about 70,000 tons.

Prospects for the production of olive oil and other vegetable oil are good, and there may be some surplus for export.

The sugar beet crop is expected to be as good or better than that harvested in the fall of 1945, and sugar production, expected to total some 98,000 tons, will be more than sufficient for the country's needs. Some 10,000 tons will be available for export.

The nut crops, mainly filberts and walnuts, are expected to be abundant, and will provide substantial quantities for export.

Iraq

Iraq is normally a surplus food producing country, mainly dates, grains and livestock products. Aside from heavy floods from the Tigris, which caused some damage in the southern region, weather conditions were ideal for crops and livestock. Excellent grain crops have been harvested, and the exportable surplus is estimated at about 300,000 tons of barley and wheat. In addition, there will be the usual substantial exports of dates. Exports of livestock and livestock products are expected to be made to neighboring countries. The major import item is sugar, of which Iraq consumes normally some 40,000 tons, all imported.

Syria and Lebanon

Like Iraq, but on a smaller scale, Syria is normally a producer of surplus food, mainly grains and olive oil. Good weather conditions and timely rains prevailed during the growing season, and the grain crops are expected to give a surplus (beyond the needs of Syria and Lebanon) of some 50,000 to 100,000 tons. The olive crop harvested in the fall of 1945 was excellent, and prospects for the crop that will be harvested this fall are average. An exportable surplus of a few thousand tons of olive oil may be possible, together with a substantial quantity of onions. As usual, all of the sugar consumed will have to be imported. In prewar years consumption amounted to about 35,000 tons for both countries.

Palestine

Production of wheat and barley was about average this year, with wheat slightly higher and barley slightly lower than last year. Production of other grains was fair. Olive oil production is expected to be low. A surplus of about 5 million cases of citrus is expected to be exported in 1946-47.

Palestine has been progressively becoming a heavy importer of foodstuffs due to the rapid increase in its population. Consequently, in order to meet its food needs for the year 1946-47 it will have to depend upon heavy imports of grain, sugar, livestock and livestock products. Practically all of these needs could be met from surpluses in the neighboring countries, provided trade relationships are not disrupted by political factors.

Iran

Available information indicates that the grain crops of Iran are between 10 and 15 percent larger than they were last year. It is possible, therefore, that there will be an exportable surplus of some 70,000 to 100,000 tons of barley, wheat and rice. There will also be the normal substantial surpluses of dried fruits and nuts. As usual, Iran will be short in sugar. If consumption of this commodity is to be maintained on the prewar level during 1946-47, imports of about 70,000 tons would be required.

THE FAR EAST*

Summary

In general, food production in the Far East, although better than last year's, has not yet been restored to its prewar volume. Transportation facilities, although improved during the past year, are still far below their prewar capacity and efficiency. Political turmoil and various degrees of civil and military strife and military control prevail in important regions, and are threatened in others. These factors interfere with food production and distribution.

Critical situations at present are in South Central China, where large numbers of people have starved and where the need for relief continues acute; in India where the problem is to obtain sufficient food grains during November, and early December to maintain rationing until the autumn rice crop reaches the market; in Korea where about 5½ million people must be fed mainly on imported grains until rice is available from this year's harvest: in Northern Luzon and some other localities in the Philippines; and in Malaya, Borneo, and the Allied bridgeheads in Java, in all of which places, food remains extremely short and daily rations very low.

Available data indicate that exportable surpluses of rice in 1947 from Burma, Siam, and Indo-China may be 1,200,000 to 2,000,000 short tons, that the southern part of Manchuria may export about 220,000 short tons of soybeans, and that about 600,000 tons of copra may be available for export from the Philippines and Netherlands Indies. Whether actual rice exports approach the upper or the lower figure will depend somewhat on weather conditions affecting crops still to be harvested; but prices offered, political conditions, and the supply of consumer goods available also will be important factors.

On the other hand, food deficits in the Far Eastern countries for 1947 consumption probably will amount to approximately 9,200,000 short tons of cereals. This is a preliminary estimate of the amount which would be required, above indigenous production, to maintain minimum ration requirements and to prevent serious under-nutrtion, and some starvation in certain countries. This amount of additional food would not bring food consumption up to prewar standards in any country except perhaps in China and India where prewar consumption was itself a minimum. However, it now appears that the deficit is in excess of the supplies which will actually be available in the world markets, and in some cases in excess of the amount which could be distributed to deficit areas within a particular country, and in still other cases in excess of the amount which could be obtained with the funds available for food from foreign sources. The greatest deficits (expressed approximately in short tons of cleaned rice equivalents) are about 1,750,000 for China (excluding Formosa and Manchuria), about 2,250,000 short tons for India, and about 2,450,000 short tons for Japan. Other important deficits may be approximately the following, in short tons: Korea, 600,000; the Philippines, 450,000; Ceylon, 600,000; Netherlands East Indies, 150,000; Malaya, 350,000; Hongkong, 150,000, and Manchuria, 450,000. As previously stated, it must be emphasized that these figures appear to be in excess of supplies which actually will be available, or which could be imported into, the Far East during the coming year.

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* At this season nearly all estimates of the production of crops in Far Eastern countries are still preliminary, since many crops which will be consumed in 1947 are not yet harvested or have been harvested only recently. Some crops are not yet planted. Final estimates may differ considerably from the preliminary figures now available.

The level of economic activity which is attained in the Far East during the coming year, and the extent of revival of the former trade and commerce of the region, will depend on the degree to which the food needs are actually met. The prewar level of food consumption would be absolutely necessary for prewar activity. Not until such supplies are available, along with other consumer goods, will it be possible to obtain from the Far East the former quantities of copra, oilseeds, rubber, tin, abaca, sisal, tea, silk, and spices.

India

The immediate problem of grave concern is to obtain sufficient imported grains to maintain the rationing system prior to the late December harvest. The stocks of grain in Government hands at the first of October were reported to be sufficient for only four weeks at the current ration scale which varies in different areas from 8 to 12 ounces, with 16 ounces per day for heavy workers in some industrial centers.

October-November arrivals of grain will be considerably below schedule. One reason for this is a direct result of the maritime strike in the United States which delayed the movement of about half of the 250,000 tons programmed for shipment during September. The export embargo on grains imposed by Brazil and the prolonged negotiations in Argentina have also caused a downward revision of anticipated arrivals in the last quarter of the calendar year. Shipments from Siam and Nationalist-held areas in the Netherlands Indies have not come up to expectations.

Internal shipments have been upset by below-average rainfall resulting in reduced output and lowered estimates for summer-grown crops in Sind. The province defaulted on the shipments of rice programmed during the third quarter of the year. Punjab and Sind are also pressing the Central Government for the return of 100,000 tons of wheat borrowed earlier in the year. Some diversions of grain shipments destined for other countries have been made to India during October, but these will not make up for losses mentioned above.

Internal procurement in Bengal has increased in September and October due to a good Aus (summer) rice crop having been harvested in August. A good main crop is also in prospect which is influencing hoarders to release some of their stocks. In Madras and adjoining areas in southern India procurement has been falling off. The summer rice crop is not of the same magnitude as that grown in Bengal. The outlook for the November and early December period in rationed areas is, therefore, extremely bleak in the South. The often predicted breakdown of the rationing system may occur, unless the ration scale can be sufficiently cut to spread available supplies over the pre-harvest period without causing civil disturbances.

The summer, Aus, rice crop in Eastern India is now reported to have been average, although total loss due to floods did occur in localized spots in southern Assam and in eastern Bengal. This crop is normally about 25 percent of the total production and is the main food source of the rural population in the producing area for the four months before the main, winter crop. This crop does not normally enter trade channels, but plans for some Governmental procurement were set up this year. In souther India, this summer crop is a much smaller proportion of the total annual rice crop and it has been reported to be below average. Summer-grown sorghums, corn, and root crops are being harvested and will add to the food supplies of the rural population. There has been no indication as to how much relief is expected from these crops.

The food picture in India has three natural facets, not entirely geographical: (1), the areas of surplus production of food grains; (2), the eastern deficit area in which the late fall-harvested rice crop is the critical factor; (3), the southeastern deficit area in which the crops grown in the winter months are the critical factor. There remains the western deficit area of Bombay and adjacent sections which involves the smallest number of people and does not reach the critical stage unless its normal sources of supply make large shipments to other deficit areas as they have done in the current year.

The tight food situation will, therefore, be of longest duration in the southeastern area, as the main, winter-grown crops are just being planted. This is the area where food output was most severely reduced by unfavorable weather in 1945-46, particularly the lack of rain in the Northeast Monsoon period of the winter months. For the eastern deficit area, chiefly Bengal, the situation will be eased for the rationed urban areas in late December. No official crop forecast has been received, but a good rice crop is expected, as the southwest summer monsoon has been generally favorable.

A good crop would considerably reduce the over-all food requirement for India after January 1. In the rice surplus areas the outlook for the main crops is also good. The other surplus areas are of importance as producers of wheat and other winter-grown crops which are just being planted. We can, therefore, look ahead to some easing of the tight food situation at the first of the year and general improvement if the winter rains and growing seasons are favorable.

China

Winter Crop Production, 1946- Wheat, barley, field peas, broadbeans, rapeseed, and oats are grown in most parts of China as winter crops, that is, they are planted in the autumn and harvested the following spring.* In relation to total local food production, these crops are of greatest importance in North China, where little rice can be grown, of next importance in the Yangtze Valley and Central China generally, and of least importance in South China.

Official reports on the production of winter crops in most of North China and in the eastern end of the Yangtze Valley are still lacking, there having been insufficient time since the end of the Japanese occupation to re-establish the former crop-reporting machinery. However, it is estimated by observers that the wheat and other winter crops in these regions were generally much better than in 1945 and perhaps close to the prewar average.

For the 15 provinces for which the Chinese crop reporting system now functions, mainly in Northwest, West-Central, and South China,** the following final official estimates of winter crop production have been issued:

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* Spring oats and spring wheat are grown in the so-called spring wheat region of the Northwest. All are officially reported as "winter crops."

** Ninghsia, Tsinghai, Kansu, Shensi, Honan, Hupeh, Szechwan, Yunnan, Kweichow, Hunan, Kiangsi, Chekiang, Fukien, Kwangtung, and Kwangsi. Data are now available for the entire province in each case. These figures exceed those previously published relating to the so-called "15 Interior Provinces," since for 3 provinces the data covered only a part of the province.

CHINA: Official estimates of winter crop production in 15 provinces for 1946 and 1931-37 average.

Crop	Production in 15 Provinces: Average 1931-37 (000 short tons)	Production in 15 Provinces: 1946 (000 short tons)
Wheat	11,988	14,857
Barley	5,439	5,109
Field peas	2,523	2,493
Broadbeans	2,689	2,557
Rapeseed	2,178	2,853
Oats	176	147

The increased production of wheat and rapeseed in 1946 compared to prewar in the fifteen provinces is due to the Chinese wartime policy of increasing the acreage of these winter crops in the unoccupied regions. It is not an indication of unusually favorable yields in 1946.

Summer crop production 1946- Summer crops are those which are planted in spring or summer and harvested in the current year. For the reason previously given in connection with winter crops, no official estimates are yet available for summer crop production in Anhwei and Kiangsu Provinces in Central China, nor in much of North China. Official forecasts so far available for fifteen provinces* are the second estimates, and are preliminary. These data follow:

CHINA: Official estimates of summer crop production in 15 provinces for 1946 and 1931-37 average.

Crop	Production in 15 provinces: Average 1931-37 (000 short tons)	Production in 15 provinces: 1946 (000 short tons
Rice (paddy) 1/	46,923	41,832
Kaoliang (a grain sorghum)	2,578	2,153
Millet	2,258	2,090
Proso millet	647	665
Corn	3,797	4,938
Soybeans	2,786	2,532
Sweet potatoes	13,476	21,381
Peanuts	1,371	1,524
Sesame	509	611

1/ Includes glutinous rice.

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* See previous footnote for list of provinces.

The great increase in sweet potato production in the fifteen provinces in 1946 as compared with prewar is mainly the result of a gradual increase in the acreage of this crop in unoccupied China during the war years, and does not represent high expected yields in 1946. The reduction in rice production is also due in part to an acreage shift initiated in accord with the Government food policy, under which more land than formerly was planted to winter crops, thus making the summer season too short on some land for a succeeding rice crop, and under which the increased growing of sweet potatoes was encouraged. These measures were intended to increase food production in the unoccupied zones so that the large numbers of refugees from the occupied zones as well as the Chinese armies could be fed.

Although there are no official figures for the production of summer crops in most of North China, observers report that growing conditions have been favorable, and average production is expected.

Rice production: The Chinese rice situation cannot be accurately assessed by a comparison of annual totals for China. Following are preliminary unofficial estimates for rice production (including both non-glutinous and glutinous rice) in important rice-producing provinces and in all China:

Province	Rice production	
	1931-37	1946 (Preliminary unofficial)
	(000 short tons)	(000 short tons)
Szechwan	8,477	6,307
Hupeh	4,242	3,620
Anhwei	2,614	2,964
Kiangsu	5,426	5,532
Hunan	5,726	5,094
Kiangsi	4,057	4,803
Chekiang	4,948	5,160
Fukien	2,593	2,481
Yunnan	1,928	1,818
Kweichow	1,407	1,234
Kwangsi	3,960	3,191
Kwangtung	9,019	7,176
TOTAL	54,377	49,380
Other provinces	809	809
All China (except Manchuria & Formosa)	55,186	50,189*

* These estimates are in most cases lower than the official second (preliminary) estimates.

The preliminary estimated total is about 91 percent of the prewar (1931-37) average.

The larger part of the reduction in rice production in Szechwan province may be ascribed to wartime crop-acreage shifts, offset by increased production of sweet potatoes and wheat. Some of the reduction, however, is due to poor expected yields this year. It is possible that subsequent estimates for this province may be lower. The reduction in Hupeh is in part attributable to acreage shifts, and to the incomplete recovery from wartime devastation. It may be partially offset by smaller-than-prewar population. The preliminary estimates for Anhwei, Kiangsu, Chekiang, and Kiangsi provinces indicate a crop considerably above average.

In Hunan province, where a severe famine resulted this spring from last year's poor rice crop, observers earlier reported that the early rice crop, harvested in July and August, was so small that a shortage would continue until the late crop was gathered in late October and November. It was believed that the total crop would not be more than 90 percent of prewar, and relief needs were reported still acute in October. For this province, therefore, the unofficial preliminary estimates may prove to be too high. The same may also be true of Yunnan, where famine is reported to have affected more than one-third of the counties during the spring and summer season, and where earlier in the season a poor crop was expected because of insufficient rain.

In respect to Kwangsi and Kwangtung provinces, the indicated shortage of about 2,612,000 short tons is real and important. In most of these two provinces the early crop, harvested about July, was reported to have been only about 50 to 60 percent of average. While the late crop, to be harvested in November, is reported to be much better, the small early crop was not sufficient to last until the late harvest. Famine conditions prevail in parts of these provinces, relieved in part by UNRRA grain. Even on the basis of prewar production, this region normally consumed the greater part of China's annual rice imports approaching one million tons (paddy basis). The total shortage in these two provinces for 1947 consumption would thus amount to about 3,000,000 short tons of rice on a prewar basis. However, this is offset somewhat by the wartime increase in sweet potato production in these two provinces, amounting to about 1,675,000 short tons, equivalent in food value to about 678,000 short tons of paddy rice. There have been smaller increases in sweet potatoes elsewhere in South China. It would seem conservative to estimate the net food deficit for the 1947 rice year in Kwangtung and Kwangsi, as compared to prewar, at roughly 2,500,000 short tons of paddy rice or the equivalent. Subsequent revisions of production estimates are believed more likely to increase the deficit figure than to reduce it.

Rice carryover: Because of the short crop of rice in 1945, the aftermath of the war, and consequent food shortages which have existed or still continue, there is believed to be no substantial carryover of rice in China except in the one province of Szechwan.

Possible food imports, 1947

North China

In view of favorable reports on the production of both winter and summer crops it is believed that enough food will have been produced in 1946 to last under ordinary conditions until the winter-crop harvest im May 1947. However, the outlook is somewhat clouded by the prospect that Government and Communist forces will continue their present military and economic operations against each other, thus hindering the flow of food crops from the countryside into Peiping, Tientsin, Tsingtao and other cities. Local consumption of food is also increased greatly when large military forces are maintained, since they live off the country to a large extent and consume relatively great amounts per person. Moreover, military operations always result in some destruction of food in storage and in transit, and may disrupt harvesting and other farm operations. Food imports into parts of North China may therefore be necessary in spite of favorable production.

Central China

In Central China there should be food enough during 1947 to meet local needs and to supply Shanghai and other cities in the region, provided that sufficient transportation is available. Due to the lack of a carryover and chronic underconsumption, this year's good crop probably will easily be consumed within the region, with little available to supply famine areas in South China.

South China

As previously indicated, there would appear to be a food shortage for 1947 consumption in the South China provinces of Kwangtung and Kwangsi of about 2,500,000 short tons of paddy rice or the equivalent. This would be equal to about 1,750,000 short tons of milled rice. An additional shortage is probable in Hunan, and supplies will not be plentiful in Yunnan and Kweichow. There probably will be sufficient food in Fukien and perhaps some surplus in Kiangsi. Because of poor transportation, the lack of a carryover, and the fact that local consumption will rise considerably where production is favorable, it is not probable that the shortage for 1947 consumption in Kwangtung and Kwangsi can be made up to any large extent by the movement of food from one province to another in China. It now seems probable that famine conditions will reappear in parts of these provinces and perhaps elsewhere in South China during the spring and summer of 1947, unless food supplies are meanwhile obtained from outside China, or unless unusual success is attained in collecting and re-distributing food supplies within the country.

Purchasing power for food imports

From the end of the Pacific war through June, 1946, China had received or was expecting 550,000 short tons, more or less, of grains and cereal products, of which UNRRA furnished about 533,000 short tons. Of the UNRRA supplies, about 478,000 short tons came or were coming from the Western Hemisphere, and about 55,000 short tons from the Eastern Hemisphere. In addition UNRRA furnished considerable tonnages of egg and dairy products, vegetable preparations and overseas surplus foods. It may be estimated that UNRRA has sufficient funds to supply China approximately the same tonnages of food products subsequent to June 30, 1946, as had been supplied up to that time. The tonnage of grains and cereal products might be more or less, depending on price and on the proportions of the funds spent for the different types of food. The UNRRA food shipments will not be completed by the end of 1946, but probably will be extended over at least the first quarter of 1947.

Since the close of the Pacific war and the resumption of Chinese foreign trade, Chinese imports have far exceeded exports in value. The trade has not, therefore, provided new funds whereby commercial or governmental agencies in China could import large quantities of food. The Chinese government and private Chinese interests still have available considerable external assets in the form of gold and United States dollars, such as could be utilized for food purchases if necessary. The Chinese will be reluctant to use these balances for current consumption needs, but it is probable that they would draw upon them if food were available in the world market above the quantities to be procurred for China by UNRRA and below the upper limit of the amount which could be distributed to deficit regions in China.

In view of limitations on the supply of food available in the world market and on the amount of food which could be distributed in China if received, it is not probable that China actually will import for 1947 consumption more than a fraction of the apparent food deficit. Under these circumstances, funds to pay for food imports probably will not be a limiting factor.

Formosa

Formosa, now under Chinese sovereignty, is known as Taiwan Province.

In 1946 the early rice crop, harvested in June, is estimated to have been about 541,000 short tons, paddy basis, and the late crop, harvested in December, is expected to be about 705,000 short tons, a total of 1,246,000 short tons of paddy for the year. This would be 35 percent better than the 1945 crop, but only about 65 percent of the 1935-1939 average. It has been stated that there will be no surplus rice for export from the island.

Sugar production in Formosa was about 75,000 tons in the 1945-46 crop year and is expected to be about 60,000 tons in 1946-47, compared to about one million tons before the war.

Manchuria

Manchuria is in part controlled by the National Government of China and is in part occupied by Chinese Communist forces. Crop information, of preliminary character, is available only for the Government-controlled area. This area produces about one-third of the crops and contains 18 million of the total population of 42 million.

In the Government-controlled area, crop production is reported to have been unusually good in 1945, with important quantities still carried over in spite of losses occurring at the close of the war. Production in 1946 is much below 1945 due chiefly to reduction in planted area because of lack of farm animals and labor. While figures are subject to error, total 1946 production of potatoes, oilseeds, and legumes may be only about 84 percent of 1945.

Soybeans- Official Japanese figures indicate that average soybean production for all Manchuria during the period 1943-1945 was about 3,527,000 short tons. Production in the Government-controlled area is believed to have been about 1,200,000 short tons in 1945 and is expected to be about 1,100,000 short tons in 1946. There may be available for export in the Government-controlled area as much as 220,000 short tons of soybeans, Soybean surpluses may also exist in the Communist-controlled area, but these are not expected to be available to the trade.

Wheat and Rice- Average wheat production for all Manchuria, 1943-45, is indicated by Japanese official sources to have been about 430,000 short tons; and rice production, about 772,000 short tons. Of the rice, about 331,000 short tons were grown in the Government-controlled areas, but on reclamation projects supplied with electric current from Communist-controlled areas. Because of the consequent break-down in the reclamation system, the 1946 rice crop in the Government area is very small, and the total rice crop may be only 40-50 percent of average. The wheat crop is also poor. Since these two crops are important in supplying food for Manchurian cities, the deficit will be severely felt.

Kaoliang.- This grain sorghum is reported by official Japanese sources to have yielded an average of 5,622,000 short tons, in all Manchuria, during the period 1943-45. Data for this year's crop are lacking, but there is no such decline as in wheat or rice.

Imports and exports- It is estimated by Chinese sources that about 2,500,000 people in Manchuria may need relief during the next six months, requiring imports of about 450,000 short tons of grain. Presumably, if this expectation proved to be correct, relief would continue to be needed for about two additional months, or until next year's winter wheat was harvested. On the other hand, there now appears to be an export surplus of some 220,000 short tons of soybeans. Presumably it would be economically advantageous to export soybeans and import cereals and other needed commodities in return. The gross imports predicted by Chinese sources as necessary for Manchuria would be in addition to the apparent food deficit of some 2,500,000 short tons of paddy in South China.

Japan

Available estimates of 1946 crop prospects in Japan are preliminary and may be subject to considerable revision. Following are tentative estimates, not official, of important 1946 crops, and comparisons with the 1932-36 average.

JAPAN: Tentative estimates of important food crops, 1946 and 1932-36 average

Crop	Estimated production 1932-36	Estimated production 1946
	(000 short tons)	(000 short tons)
Rice (brown)*	9,924	9,850
Sweet potatoes	3,822	5,720
White potatoes	1,431	1,780
Wheat	1,288	750
Barley	838	480
Naked barley	934	570

* To convert to paddy, divide by 0.804.

The wheat and barley were mainly winter crops harvested in the early summer, while the rice, sweet potatoes, and white potatoes are autumn-harvested crops. The comparatively large potato crops are due to expanded acreage compared to prewar.

Food Requirements and Supplies

The average population of Japan during the year 1947 probably will exceed 78,000,000. Food consumption averaged about 2300 calories per person per day before the Pacific war and nearly 2000 calories during the war. During the war the population in Japan was about 5,000,000 persons less than it will be in 1947, chiefly because of the large number of Japanese soldiers, sailors, and civilians residing in other countries and being fed mainly by those countries.

The six staple crops listed above ordinarily supply 80 to 85 percent of the caloric value of home-produced food in Japan. Allowing for unavoidable wastes, milling losses, seed, feed, and industrial uses, the indicated crops would yield for human consumption about 36 trillion calories. This represents a greater-than-prewar net caloric value per gross ton of food, because of higher milling ratios, reduced industrial use, and reduced utilization for livestock feed. If it is optimistically assumed that this production is only 80 percent of this year's indigenous food production in Japan, the total indigenous production would amount to about 45 trillion calories, or only about 1580 calories per day per person.

A war-time level of food consumption per person in Japan would require about 57 trillion calories. The difference between this and 45 trillion calories, that is, 12 trillion calories, would be equivalent to about 4,000,000 short tons of brown rice (allowing for milling loss). This seems a huge amount, but in 1936, when rice imports were lower than for several years previously, and when population was considerably smaller, Japan imported in the form of rice, soybeans, and sugar alone, the principal food imports, the caloric equivalent of about 3,500,000 short tons of rice. Of this amount about 50 percent was in rice, 20 percent in soybeans, and 30 percent in sugar. The protein of the soybeans and the quick-energy value of the sugar were essential in the maintenance and development of personal efficiency among Japanese industrial workers.

Japanese rice imports were formerly derived mainly from Korea and Formosa. Most of the soybeans came from Manchuria. The sugar came from Formosa. Under present conditions, none or practically none of the three principal food imports are obtainable for Japan from any of the three former sources. Other sources capable of supplying equivalent amounts of food are also not available.

Under the circumstances, it is apparent that feeding levels up to the war-time standard cannot be maintained in Japan during the coming year. The degree of industrial activity which it is possible to achieve in Japan will depend on the degree of success in providing food.

The problem of Japanese food supply is complicated by the fact that the self-supplying population (farmers and fishermen) will consume practically a normal diet before they will sell a surplus to non self-suppliers. Assuming that there will be about 20 million self-suppliers consuming food at the rate of 2200 calories per day, 16 million partial self-suppliers at the rate of 2,000 calories per day, and 42 million non self-suppliers provided with an average diet of 1600 calories per day, total caloric requirements will be about 52.3 trillion calories.

This would represent food consumption about the same per capita as in 1946, but greater in total because of the increased population. The excess requirement of about 7.3 trillion calories above domestic food supplies would be equivalent to about 2,460,000 short tons of husked rice. This quantity may be taken to be a rough approximation of a minimum requirement, since it represents a food consumption on the part of the non-farm population so low that industrial activity will be at a minimum. Indeed, any industrial activity at all can be maintained under these conditions only by a rationing system such that persons doing actual industrial work receive much more food than other persons of the same age.

For best results it would be desirable that a considerable share of whatever food imports are obtainable for Japan be in the form of soybeans and sugar. Considering limited world supplies of these two products, marked success in fulfilling this requirement is unlikely.

South Korea

The total wheat and barley crops harvested early this summer in South Korea are now estimated to have totalled about 578,000 short tons or about 57 percent of the 1940-44 average. The fall crop is expected to total about 1,962,000 short tons of brown rice, or 84 percent of the 1940-44 average. Other grains and pulses, harvested in the fall, are expected to yield about 276,000 short tons, about 70 percent of the 1940-44 average.

With a total population of about 18,000,000, the rationed population, increased by the floods and by the cholera epidemic, rose from about 5,500,000 in July to about 5,750,000 in August and about 6,500,000 in September. The August rationed population required about 57,000 short tons of grain per month, and supplementary rations to workers in priority industries require about 2,700 short tons per month in addition. Maximum efforts to collect wheat and barley from this summer's harvest have been hindered by the floods, by the cholera epidemic, and by subversive opposition. The heavily populated Seoul-Inchon and Pusan areas have been almost entirely dependent upon imported grain since June, and will continue so until December when the new rice crop is available.

While the fall crops will relieve the food situation temporarily they will not be sufficient to feed the country through the succeeding crop year. The amount of the deficit will depend on political and price factors influencing collections as well as on the production. Consumption will have to continue to be kept as low as possible through rationing, but imports will be required in any case. Subject to correction such minimum imports in the 1946-47 consumption year may be estimated at about 600,000 short tons of brown rice or the equivalent in wheat flour, corn, or other grains.

Burma

Prediction of a good paddy crop year is justified at the time of publication due to timely distribution of a slightly above-average rainfall during most of the growing season in the rice areas. However, the last and critical month of the growing season is still ahead. Early indications are that the Government's declared goal of 8.5 million acres may be attained. This would be an increase of about 1.7 million acres over the 1945-46 crop but still far short of the 12.5 million acres planted in prewar years.

There are three factors to be kept in mind when considering possible yields from the coming crop. First and most important is the distribution of rainfall in the final month of the growing season. Secondly, the yield will be less than normal on much of the land brought back into cultivation this year, due to the difficulty of clearing and controlling rank grasses and scrub jungle that sprang up on the land while it lay fallow during Japanese occupation. Thirdly, more than normal amounts of the crop were planted by broadcasting seed instead of transplanting seedlings due to the higher costs and greater cattle hours required for the latter method. Yields from broadcast fields are lower than from transplanted fields under similar growing conditions.

A well formulated estimate of the crop cannot be made until the acreage is known and the maturing season is finished. However, the current crop (1946-47) is expected to produce an exportable surplus. Even with favorable weather conditions it is not likely that the crop will be more than 1 million tons in excess of domestic needs. Carry-over stocks are very low as maximum quantities have been shipped to India in the last few months.

In the central Burma Dry Zone the rainfall has been below normal, the upland crops are only fair, and the sesamum and peanut acreage is reported less than last year. This will reduce the final output of these oil seeds and result in a greater clamer for importation of cooking oils into Burma during 1947.

French Indo-China

Due to internal disturbances in French Indo-China, it has been impossible to report accurately on the crops for 1945-46 and 1946-47, but with the signing on September 15 of a pact between France and the new Indo-China Government of Viet Nam, economic conditions should begin to return to normal. It is hoped that during 1947 there will be progress toward normal in rice and rubber production; but reconstruction will require the importation of large quantities of consumer goods. In 1939, 5,000,000 tons of rice were produced and 1,819,000 tons exported, but rice exports from Indo-China cannot be expected again to reach this level until after conditions have been stabilized.

The 1945-46 rice crop of all French Indo-China was estimated at 3,500,000 short tons milled rice at 70 percent extraction rate. By the end of 1946, exports may reach 140,000 short tons, including exports from old stocks. Some stocks of milled rice and paddy from prior crops exist, but in areas where fighting between the French and the Indochinese took place as much as 50 percent of the crops either were not harvested or were destroyed after they were harvested with the Indochinese keeping only enough for themselves. In Cochin China, the large prewar surplus area, production fell off due to the opening of sea dikes; and in Cambodia, the farmers near cities began to grow truck gardens because the garden products commanded higher prices on the markets.

No estimates of the size of the crop to be harvested in December 1946 and early in 1947 are available, and predictions as to possible exports must therefore be only tentative. Demands on Southern French Indo-China for rice for Tonkin are expected to be less than during 1946. The fact that a crop of 10,000 tons of corn was raised in the North compared to practically none last year, the reduction of population due to last year's famine, and the improvement of the dikes are factors contributing to this reduction in domestic demand. Depending on political and price factors, exports ranging from 200,000 to 500,000 tons might occur during 1947, from current production and stocks. This tentative estimate may be subject to considerable revision.

Siam

The prospects of a good rice crop in 1946-47 have been reduced due to extremely light rains in June, July, and August. The acreage this year was expected to increase to 5.3 million acres compared with 4.9 million acres last year. With the average yield of 30.1 bushels per acre, Siam looked for a larger crop than the 120 million bushels or 1,890,000 short tons of milled rice harvested last year. Now she will barely raise enough to meet her own internal needs, and what rice is shipped from the country will be from carry-over stocks of previous years.

The most affected area is in the upper central plain above Bangkok where floating rice is planted. In this area, plowing takes place from April until June when the rice is thinly broadcast and depends upon deep floods (up to 15 feet) for weed control. The usual floods did not develop, and extensive acreages of rice planted by this method were choked with weeds and did not produce a crop. This type of rice is very long-lived and cannot mature a crop if planted later than the middle of September. If favorable rains come in October, it will greatly help increase the output of the acreage which has a stand of rice. Other limiting factors have been the lack of suitable seed, shortage of work animals, rinderpest infestation of cattle, labor troubles, and political disturbances.

Between August and December, especially during the flooded season of August to October, the amount of available paddy that can be brought in by water to Bangkok from the North Central Plain is estimated at about 370,000 tons. The total amount that can be brought in by rail from Northeastern and Eastern Siam between August and March may be about 480,000 tons. Of that coming by rail, about 140,000 tons may be available before December. It is estimated that the foregoing shipments from the new crop will be entirely consumed domestically.

From January to April, about 125,000 tons of old paddy might be brought in from the South Central Plains for export. Additional amounts may be available from old stocks.

Factors seriously affecting the flow of rice to market are mainly the low basic price of rice compared to other domestic prices, the continued absence of consumer goods, and the extremely low price of three cents a pound for export rice. Smuggling has been very prevalent and an estimated 20,000 tons per month or more have been smuggled to acutely deficit areas in China, Malaya, and Northwest French Indo-China, where the price is high and consumer goods, clothing, canned goods, simple drugs, soaps, fish hooks, lines and nets can be bartered in exchange.

Malaya

The food situation in the Malayan peninsula is still one of the most acute in Southeast Asia, with little hope of improvement in the next three months. According to statistics the amounts of foodstuffs produced and imported through allocations this past year have not been sufficient to maintain an adequate living. Considerable smuggling of rice back and forth across the Malaya-Siam border and also by ship into the eastern ports has kept the populace from starvation.

Beginning August 18, the rice ration in Singapore was cut to 26 ounces per week per man, 21 ounces per woman, and 16 ounces per child. In the rural areas, the ration is now 16 ounces per week per person. Little rice has been moving through Singapore to the rural areas, and the government controls all distribution and allocation to retail shops. They are also endeavoring to prohibit the sale of rice to other than ration card holders, and also the sale to restaurants. The low rice ration and the general shortage of food has maintained high prices on both the legal and "black" markets.

The estimate for the 1945-46 crop in Malaya was 812,000 acres producing about 300,000 short tons of milled rice (70 percent extraction) as compared with the 1935-39 average production of 426,000 short tons. Taking into account population growth and the increase in consumption, rice production has decreased from 41 percent of prewar requirements to 34 percent of requirements at the present time. A large acreage which was under nonfood crops during the Japanese Occupation has been abandoned. The government is planning to put 500,000 acres under supplementary food crops, and has issued an order that anyone owning more than 100 acres of land must put two percent of his land under rice, ragi or maize; this mainly applies to the large plantations. The cereal shortage in Malaya in terms of rice equivalents is expected to be about 350,000 short tons in 1946-47, and this must be met from outside sources. Wheat and wheat flour will not be satisfactory substitutes for rice here, as the natives do not have the facilities to use them; maize, however, can be used.

Philippine Islands

The food situation in the Philippine Islands has shown a marked improvement over last year. There are some scattered areas where weather conditions seriously affected the crop, but the majority of Filipinos increased their acreages of root vegetables, the produce of which is now tiding over the rural areas until the fall harvest of rice. There still remains the economic adjustment whereby sufficient foodstuffs can be imported to enable the people to return to the production of export goods for world trade.

For all the Philippines, sources estimate the 1945-46 rice area to have been 80 percent of prewar or 4,087,000 acres, producing 1,753,000 short tons of palay; leaving about 1,502,000 short tons palay (1 million short tons of milled rice — 65 percent extraction rate) for consumption during the past consumption year after seed requirements had been met. Rice supply is the basic factor in the Philippine food situation, with an annual demand estimated at 2,888,000 short tons palay (1,877,000 short tons milled rice). The tentative forecast for 1946-47 of 4.2 to 4.4 million acres yielding 1,940,000 short tons palay, is still 20 percent below the average prewar output. There is a shortage at present and will be until after the rice harvest in December. Thereafter, it is estimated domestic rice will supply needs until August of 1947. The rice shortage for 1946-47 is estimated at 1 million short tons palay (650,000 short tons milled rice). It is expected that the increased production of corn and root vegetables will supply from 200,000 to 250,000 short tons leaving a deficit of approximately 450,000 short tons in terms of rice to be supplied from outside areas.

The Philippine corn acreage is estimated at 1,291,000 acres, compared to 2,251,000 acres prewar, with an estimated production of about 331,000 short tons shelled corn compared to 602,000 tons shelled corn prewar. The opinion is that the 1946-47 acreage will be as great if not greater than prewar. Sweet potato acreage, to be planted, will possibly be about 250,000 acres or 77,000 acres more than prewar, with a possible production of 248,000 tons compared with 190,000 short tons prewar. The sugar area forecast to be harvested for 1946-47 grinding is 44,000 acres producing about 74,000 short tons of centrifugal sugar compared with 14,000 tons during 1945-46 and 1,102,000 tons annually prewar. The Filipinos may be able to depend on domestic sugar for the first half of 1947.

The United States Government and the new Philippine Government have signed an agreement whereby the United States will purchase all the copra available for export for one year. Exports in 1947 are expected to total about 500,000 short tons of copra compared to an average of about 600,000 short tons of copra and copra equivalent of oil exports annually prewar.

The livestock situation still is very acute. High prices of fresh meat encourage slaughter. The total supply for 1946-47 is estimated roughly at 100,000 tons. Hog and poultry numbers have increased; and 100,000 baby chicks to be used as breeding stock have now been imported by air from California. Fresh fish production will not exceed prewar.

Total food production in the Philippines for 1946-47 will be affected principally by the agrarian unrest in central Luzon; the shortage of animals, equipment, fertilizer, and seeds; the lack of funds for financing long-term crops such as sugar; and the uncertain prospects regarding the reconstruction of industries. Difficulty is anticipated in controlling the distribution of domestic rice and in all probability rationing will continue this coming year.

In the Cagayan Valley of northern Luzon, the present food situation is the worst in the Islands. This section suffered a most destructive typhoon in July followed by floods. The upper Cagayan Valley is now harvesting what remains of its corn crop, about 40 percent. The upland rice has also reached maturity so that the food situation there will be somewhat relieved for a short time.

In central Luzon, the most important food producing area of the Island, agrarian unrest has curtailed the production of rice and sugar and may continue to do so for some time.

In southern Luzon, the food situation is surprisingly good. Rice is still short, but the people are supplementing their diets with camotes (sweet potatoes), cassava, and other root vegetables. This area had a small rice harvest in September, but the main harvest is in December.

In the Visayan group of the Central Islands, 90 percent of the upland rice area was planted and is now being harvested. Sugarcane was originally planted here and was the main cash crop, but there will not be sufficient cane to operate one central before May of 1947. Ormoc, on the island of Leyte, will have its sugar central in operation the first of the year with a 15 percent of prewar supply of cane. As a whole the people of this group of islands are now very poor, since they have depended on the sugar and abaca plantations for their livelihood. The relatively low price of sugar and abaca compared to the price of food and other living costs have kept the people from returning to these industries.

On Mindanao, where there was a drastic shortage of rice, the people in the rural areas expanded their planting of quick food crops, especially corn and sweet potatoes. The harvest of these emergency plantings now is contributing substantially toward the food supply, but serious food problems still exixt in some local areas. Locust infestations in parts of Mindanao and Cebu have greatly damaged the crops, with corn suffering the most.

Netherlands Indies

On October 14, an agreement was signed between the Netherlands government and the Indonesian Republic bringing to a close the 14-month old hostilities. This may ease the critical food situation in the former Allied-held territories of Java and the Outer Provinces with a flow of rice from the area that has been in the hands of the Indonesians. Up until this time only 500 tons had been officially transferred from the interior to the Allied group, while a possible 10,000 tons or more may have filtered in unofficially.

How this new settlement will affect the agreement previously signed between the Government of India and the Indonesian Republic is yet to be seen. Of the 500,000 tons of rice to be delivered to India according to this agreement, only about 18,000 tons of gabah (unhusked rice with no stalks) have been delivered thus far, and five ships were loading at Java ports in October. The movement of rice to the ports has been decreasing, but it was hoped that the arrival of a shipload of textiles and bicycle parts from India would speed up the flow.

It is impossible to say now what the 1947 food outlook will be. Lack of adequate land and water transportation will hinder the shipping of foods into the Outer Islands, where it is badly needed, if these provinces are to return to their prewar export trade of copra, kapok and spices. It has been estimated that the territories which have been held by the Allied forces would need 136,000 tons of rice to sustain a minimum ration. How much of this can now be supplied from the Indonesian territory is yet to be seen.

The United States has signed an agreement with the Netherlands Government to assist in the rehabilitation of the copra industry. It is expected that 300,000 long tons of copra will be produced in the next twelve months. Before the war, 95 percent of the copra output of 1.2 million long tons was in the hands of the native producers; since 1943 they have produced no copra as they have been forced to produce their own foodstuffs which were formerly imported. It is hoped that during the first six months of 1947, 145,000 tons may be available, provided a sufficient quantity of rice is imported to enable the population to switch from rice to copra production.

It is hoped that within one year the coffee production can be brought back to 50 percent of prewar and the rubber output to 40 percent of prewar. Considerable rehabilitation and replanting will be required on the plantations as they were abandoned for smaller cultures or turned into large-scale production of rami and castor beans. The spice industries of Banka and South Borneo will take 3 to 4 years for restoration and 8 years to catch up with their prewar production. Of Banka's 20 million pepper trees only one-half of 1 percent remain, and in South Borneo only 20 percent are now standing. What stockpile of pepper was in the Netherlands Indies after the war was smuggled to Hong Kong where it commanded high prices.

BRITISH ISLES AND BRITISH DOMINIONS

Summary

The 1946-47 food supply situation in the British Commonwealth of nations will be slightly less satisfactory with respect to grains and livestock products than last year, though the variety of foodstuffs will be somewhat improved because of increased supplies of fruit, fish and eggs in the shell. Despite larger wheat crops in Canada and Australia than in 1945-46, the total exportable wheat surplus of these two countries will be about 50,000,000 bushels below last year because of the smaller carry-over. The Union of South Africa and New Zealand will require about the same volume of grain imports this year as last.

The United Kingdom and Eire had excessive rains during the harvest season which resulted in heavy losses of wheat and other grains, and reduced the quality of harvested supplies. This year's wheat production in the United Kingdom is estimated at only 68,000,000 bushels as compared with 81,000,000 last year. The rains in the British Isles are also believed to have reduced the yields of potatoes and sugar beets. The effect of this crop damage on livestock feeding during the coming year is not yet clear, as a reduced supply and poor quantity of feed-grains may be offset by the increased quantity of wheat unfit for human consumption. In any event, it now appears probable that the production of livestock products during the coming year will be curtailed somewhat by shortage of feed supplies.

No sizable quantities of meats or dairy products will be available to non-Empire countries from the surplus producing areas of the Empire, as the United Kingdom has contracts to take their exportable surpluses of beef, mutton, bacon, butter and cheese. Declines in cattle slaughterings in Australia, New Zealand, and Canada will reduce British supplies of beef from Empire sources. Lower bacon and ham exports from Canada will be largely offset by United Kingdom imports from Denmark which have reached sizable proportions, though they are not up to prewar levels. Slightly less cheese will be available for export to the United Kingdom from the Dominions, but considerable increases in United Kingdom butter imports are anticipated from New Zealand as well as 1947 imports of more than 80,000 tons from Denmark.

UNITED KINGDOM

Food production for the year 1946-47 in the United Kingdom is considerably below the output of 1945-46 because of excessive rains during the grain harvest. Stocks of most foods, including imported products, are low. At this date fish appears to be the only major food which may be produced in quantities as large as or larger than in 1945-46. As the result of reduced home production, the United Kingdom is faced in 1946-47 with somewhat greater dependence upon outside sources of supply than in 1945-46. Long-term food contracts have been made by the Ministry of Food with important supplying countries giving the United Kingdom an assured, though limited, supply of beef, bacon and ham, dairy products and wheat.

Domestic Supplies

Almost continuous rains and frequent gales during August and September placed crops in the United Kingdom in critical danger. Losses have been serious particularly in respect to barley and oats, but some wheat was also lost, and the quality of much of the remaining crop was lowered. As a result of the bad harvest weather conditions and reduced acreage, domestic grain crops will be between 15 and 20 percent below last year, and the quality is expected to be such that still smaller amounts will be fit for use as food.

UNITED KINGDOM: Estimated Production, 1946
Compared with 1945

	1945 Thousand Bushels	1946 Thousand Bushels
Wheat	81,237	68,327
Barley	98,280	81,549
Oats	227,150	184,204

The weather has had adverse effects upon other crops as well as cereals. Conditions have favored development of potato blight and it is feared that losses from this cause may be great. The sugar content of beets is being reduced, windfalls of apples and other fruit have been excessively heavy and hundreds of acres of hop vines have been blown down into the mud. Tomatoes have failed to ripen and many other vegetables are suffering from excessive moisture and lack of warm weather and sunlight.

Some liquidation of poultry, pigs and cattle, other than dairy cows, is expected during the autumn because of reduced feed rations. This will result in a temporary increase in domestic supplies of poultry, pork and beef, but will be reflected in smaller supplies of eggs and later in meat products.

The extent of the livestock liquidation is difficult to forecast with any degree of accuracy, but farmers undoubtedly will stretch their limited feed supplies as far as possible.

The foregoing account of crop conditions indicates the precarious position of feed supplies. Counting on a normal supply of home-produced feeds, the Government found it necessary last spring to announce drastic cuts in feed rations for the current autumn and winter. It is estimated that a reduction in the flour extraction rate from 90 percent to 85 percent, made in September, will add 300,000 tons to the supplies of feed during the coming winter.

Even the hay crop was seriously reduced in quality by unfavorable weather during the haying season. The quantities of grain available for feeding, however, may be considerably in excess of previous estimates as large quantities of wheat and barley are likely to be unfit for milling and brewing purposes. In this event the feed situation might actually be improved but demands for outside supplies for human consumption would be magnified.

Import Prospects

The United Kingdom has entered into various agreements with the Dominions, Denmark and Argentina, to take certain exports at stated prices from these countries. Long-term purchase agreements with Canada include delivery to the United Kingdom during the year 1947 of 100,000,000 pounds of beef, and as much more as Canada may be able to deliver; 350,000,000 pounds of bacon and ham; 125,000,000 pounds of cheese during the April-March year; 1,750,000 cases of shell eggs; and 160,000,000 bushels of wheat during the August-July crop year.

Practically all of New Zealand's exportable surplus of dairy products and meats are likely to be sold to the British Ministry of Food through a bulk purchase agreement recently extended to 1950. Meat and cheese shipments by the Dominion for the year ending July 31, 1947 will be slightly below the 1945-46 level, while butter and dried milk shipments are expected to be slightly higher. A similar agreement has been made with Australia and shipments in 1947 will largely go to the United Kingdom as was the case in previous years. Total Australian meat exports in 1947 are expected to be about the same as in 1946, but butter and cheese exports are likely to be reduced because of drought in the important producing areas.

A preponderance of the exportable surpluses of Danish butter, bacon and eggs, and of Argentine meat, have also been contracted for by the British Ministry of Food. These shipments, together with meat shipments from the Dominions will be adequate to meet the major part of the United Kingdom's 1947 import meat requirements, provided distribution under the ration is not increased above 1946 levels.

The wheat contract with Canada will likewise go far in assuring supplies to meet United Kingdom's wheat and flour import requirements. The amount agreed upon for delivery during the August 1, 1946 to July 31, 1947 year, namely, 160 million bushels, is approximately 10 million bushels more wheat than was exported by both Canada and the United States to the United Kingdom during the July-June year, 1945-46.

In addition to the long-term contract, special food contracts made by the British Ministry of Food cover a number of items which will tend to improve the variety of the British Diet compared with the war years. Among these products from the 1946 crop which will be shipped by Canada to the United Kingdom are more than 3,000,000 boxes of fresh apples and substantial quantities of canned and evaporated apples, peas, beans, and raspberry pulp. Considerable supplies of both deciduous and citrus fruit are also being obtained from non-Empire, as well as from other Empire sources.

EIRE

Heavy rainfall during August and September, similar to that prevailing in United Kingdom has seriously threatened the harvesting of this year's grain and root crops. Although the entire amount of crop damage is still unknown, it is believed the wheat crop has been reduced about 25 percent below last year. Supplies and quality of feed grains have also been lowered from earlier prospects.

Conservation of stocks, as well as substantially larger imports than in 1945-46 are deemed necessary to meet Eire's wheat needs for the latter part of 1946 and early months of 1947. The ninety percent extraction rate of wheat is being continued and the government has organized a bread rationing scheme which is suitable for adoption on short notice should the scarcity of wheat warrant this action in future months.

Fats are in especially short supply as margarine production was suspended entirely in the early summer from the lack of vegetable oils necessary for its manufacture, while 1947 butter production is expected to be hardly more than adequate for the maintenance of the weekly 6 ounce per capita ration.

Livestock numbers, especially cattle, and the output of beef and dairy products, are expected to be well maintained in 1946-47 providing small imports of oilseed cake and meal can be secured to supplement home-grown foods. Some grains, especially wheat and barley, rendered unfit for milling because of storm damage are expected to provide some additional feedstuffs.

Small amounts of corn have been imported from Argentine during 1946 to assist hog production, but it is doubtful that any significant increase in the output of pork and pork products will be noted during the 1946-47 season. Hog numbers have declined to about 50 percent of pre-war years.

The exports of cattle, poultry and eggs, destined principally to the United Kingdom, increased somewhat during the first five months of 1946, while exports of sheep and such meats as beef and veal, mutton, lamb and canned beef declined. It is considered doubtful, however, if Eire's export trade in agricultural commodities, can be maintained during 1947 because of the acute shortage of food cereals resulting from the present unfavorable harvest season and the necessary diversion of previously exportable foodstuffs to home consumption.

EIRE: Principal agricultural exports 1/
in 1945 as compared with 1938

Commodity	Unit	1938	1945
Cattle and calves	No. of head	702,290	495,546
Sheep and lambs	" " "	297,440	81,725
Hogs	" " "	45,773	6
Poultry	" " "	615,140	64,121
Beef and veal	cwt. 2/	2,538	76,666
Canned beef	"	-----	288,250
Mutton and lamb	"	23,978	2,728
Offals	"	3,632	6,311
Bacon and ham	"	632,289	22
Rabbit meat	"	48,436	72,454
Poultry meat	"	101,950	165,667
Creamery butter	"	327,636	-----
Eggs	Gt. hnds. 3/	2,547,660	1,788,876

1/ Insofar as is known, these shipments were consigned almost entirely to United Kingdom.
2/ 112 pounds.
3/ 10 dozen.

CANADA

Total Canadian supplies of grain, potatoes, fruit and poultry products during the year August, 1946 to July, 1947 will be larger than last year. Domestic consumption of cereals during 1946-47 will be at about the same levels as last year and a continuance of rationing is expected to stabilize consumption of poultry, eggs, dairy products and meats. Because of larger crops, both domestic consumption and exports of potatoes and most fruits, particularly apples, may be expected to be higher this year than in 1945-46.

CANADA: Crop production 1946
compared with 1945 and prewar

Product	1935-39	1945	Estimated 1946
		Thousands of bushels	
Wheat	312,599	305,912	440,567
Oats	338,071	381,596	411,459
Barley	88,882	157,757	164,206
Rye	8,791	5,883	7,588
Peas	1,343	1,194	1,700
Beans	1,283	1,294	1,400
Flaxseed	1,508	7,593	8,742
		Tons	
Sugar beets	518,360	619,000	680,000

Exportable surpluses of wheat, on the other hand, will not be as large as in 1945-46. Despite a 40 percent increase in wheat production, total supplies, including the new crop and carry-over on August 1, were only 510,000,000 bushels compared with last year's supply of 564,000,000 bushels because of the large exports from stocks last year.

A smaller acreage and a better yield per acre makes the 1946-47 coarse grain crop prospects approximately the same as last year. Requirements for feed grains, however, may be less than last year. In this case the rather tight feed situation which has prevailed for several months would be considerably eased, and somewhat larger quantities made available for export.

The shortage of feed has been reflected in the production of livestock products. Estimated production of beef and pork at inspected plants, and consequently exportable supplies, are expected to be considerably lower for 1946-47 than for 1945-46. Production of milk, cheese and butter may also be somewhat smaller than for the preceding year. During the first week of October inspected hog slaughterings were running only 65 percent of the slaughterings for the same period, 1945 and inspected cattle slaughterings between 80 and 85 percent of the same period a year ago. Hog slaughterings for the first half of 1947 are expected to approach numbers for the same period in 1946, while cattle slaughterings will probably continue slightly below 1946 levels.

The United Kingdom has agreed to take all the beef Canada can ship during the 1947 calendar year, according to the new beef arrangement announced in Canada on October 9. While the 1947 minimum was set at 120,000,000 pounds, Canada has been advised that the United Kingdom would accept all the beef that could be provided by the Canadians. Canada, under the long-term bacon contract with the United Kingdom, also has an outlet for all bacon and ham available for export. Since the Wartime Prices and Trade Board has announced that meat rationing would be continued in Canada shipments of bacon to Britain should continue into 1947 at approximately the 1946 level. A total of some 300,000,000 pounds of bacon may be shipped to the United Kingdom during the calendar year 1946.

The Canadian potato crop on the basis of conditions during the fourth week in September is estimated at 74,380,000 bushels, an increase of 24 percent above the crop of last season and 9 percent greater than the 5-year average 1939-43. The apple crop is expected to be twice as large as last year and 15 percent higher than the 10-year average 1935-44. Both potatoes and apples will be available for export in considerable quantities.

These apples can be easily disposed of as there is an active demand in the United States and the United Kingdom has contracted to take about 3,200,000 boxes.

Other special food contracts made with the British Ministry of Food are for delivery of 374,000 bushels of dried peas, 560,000 bushels of dried white beans, 500 tons of plum pulp, 250,000 cases of canned apples, 80,000 pounds of evaporated apples, and 2,500 tons of raspberry pulp.

AUSTRALIA

Throughout the greater part of 1946 seasonal conditions have been very satisfactory in Australia with the exception of Queensland and northern New South Wales. As about 1/3 of Australia's entire wheat crop, 50 percent of her milk, butter and cheese, and about 60 percent of her beef supplies are normally either grown or produced in these two states, continued dry-weather in the area over several months' period has tended to greatly reduce Australia's grain and livestock prospects.

The acreage sown to wheat for grain in the 1946-47 season is estimated at between 12.75 million and 13 million acres. If rainfall is adequate during October and November, production should be about 160 million bushels. This compares with production of approximately 142 million bushels in 1945-46, from which, after allowance was made for carry-over, around 60 million bushels were available for export mainly to areas in the South Pacific and those bordering the Indian Ocean. The 1946-47 barley acreage of 887,000 acres is more than 25 percent greater than in the previous crop year. If the season continues favorable in South Australia and Victoria, the production of barley should be the largest for many years and well above the 11 million bushels harvested in 1945-46.

During 1945-46 2,500,000 bushels of "paddy" rice was produced from 28,372 acres. This compares with a production of 1,600,000 bushels in 1944-45. Practically all of the 1945-46 crop harvested during April to June will be exported, as domestic consumption is restricted to invalids, hospitals and a small number of Asiatics domiciled in Australia. A small increase in acreage is expected for the 1946-47 season.

Because of dry weather and strikes of meat packing workers in Queensland, the main beef producing area of Australia, the estimate of 1946 meat production in Australia has been lowered to 1,000,000 short tons (carcass weight) with the possibility that production may fall as low as 980,000 tons. Production was just under 1,000,000 tons in 1945. The 1946 estimate is comprised of 504,000 tons of beef and veal, 224,000 tons of mutton, 156,800 tons of lamb and 123,000 tons of pork. Australian exports of meat are estimated at 308,000 tons in 1946, including 106,400 tons of beef, 72,800 tons of lamb, 22,400 tons of mutton, 22,400 tons of pork and pork products, 9,000 tons of offal, and 75,000 tons (carcass equivalent) of canned meat.

As a result of the Queensland drought the present outlook for beef production in the first part of 1947 is not good. Mutton and lamb production during the 1946-47 season will be considerably above that of the 1945-46 season. The production of pork has been affected by high prices and restricted supplies of feed grains and protein supplements. There was a considerable decrease in hog population during the year ending March 31, 1946. On the basis of the production outlook, total meat exports from Australia in 1947 should be at about the same level as in 1946, the reduction in beef being compensated by an increase in mutton and lamb.

The production of butter and cheese in 1946 is estimated at 168,000 and 45,000 tons respectively, compared with an output of 153,000 and 40,000 tons in 1945. Exports for 1946 are officially estimated at 73,000 tons of butter and 19,000 tons of of cheese as compared with exports of 47,000 tons and 13,000 tons in 1945. The 1946 export figures are not likely to be reached in 1947 as the present outlook for dairy production is not satisfactory. Drought conditions prevail in all the dairying districts of Queensland and in the greater part of the dairying area of New South Wales. However, conditions are generally very good in Victoria and the dairying districts of the other States. The cattle population is much below normal and is still being depleted in the drought areas.

Production of eggs in 1946-47 (July-June season) is estimated at between 120 and 130 million dozen, as compared with 113,149,532 dozen in 1945-46. It is expected that 30 million dozen eggs in shell and over 20 million lbs. of egg pulp will be exported in 1946-47 as compared with 7,060,467 dozen and 17,609,031 pounds in 1945-46.

Dry weather and frost have reduced the 1946 sugar production to approximately 638,000 short tons or about 12 percent below last year's production of 717,000 tons. The drought has also seriously affected plantings for the 1947 harvest. Exports of sugar in 1945-46 amounted to 169,000 tons as compared with 128,000 tons in 1944-45. The British Government has agreed to purchase the whole of Australia's exportable sugar until 1949.

The 1946 dried vine fruit pack is estimated at 82,000 short tons, including 16,000 tons of currants and the remainder in raisins. The total production was 76,000 tons in 1945. Of 1946 production 58,000 tons is allocated for export as compared with 48,000 tons exported in the previous year. Production in 1947 should equal that of 1946.

The 1946 canned fruit pack amounted to 1,924,710 cases of 2 dozen 30 ounce tins, comprising 233,760 cases apricots, 1,020,817 cases of peaches, 641,083 cases of pears and 29,050 cases of mixed fruit, as compared with a total production of 2,081,953 cases in 1945. Approximately 1,000,000 cases will be exported to the United Kingdom and 100,000 cases to New Zealand and other destinations in 1946.

Apple production in the 1945-46 season is estimated at about 13 million bushels. Of this amount nearly 2 million bushels will be exported during 1946.

NEW ZEALAND

Indications are that New Zealand will continue as an important exporter of meat and dairy products during 1946-47. Mild and rainy weather has aided pasture growth, largely offsetting the feed shortages induced by the drought and on a whole the stock have wintered in above-average conditions.

Predictions are that livestock production will be generally well maintained and that exports of dairy products, especially butter, are expected to exceed those of 1945-46.

Even with the dry-weather effects on pastures, butter production for the 1945-46 season ending July 31 totalled 142,000 short tons and cheese production 103,000 tons. Because of the better 1946-47 outlook for production, butter output for 1946-47 should be about 157,000 tons and the production of cheese about 96,000 tons. Exports of butter and cheese during the 1945-46 season were 116,000 and 98,000 tons respectively. If 1946-47 production attains the aforementioned level, 130,000 tons of butter and 92,000 tons of cheese should be available for export, chiefly to United Kingdom under the provisions of the bulk purchase agreements recently extended until 1950.

No official figure has been released on New Zealand's 1945-46 meat production. However, production appears to have been larger than for the previous season, namely, about 600,000 tons. During 1945-46 exports of frozen meat amounted to 405,000 tons, and of canned meat 7,500 tons (carcass equivalent). The high production for export resulted partly because of liquidation due to drought. The export goal for 1946-47, consequently, is set at the lower figure of 393,000 tons of frozen meat and 7,500 tons (carcass equivalent) of canned meat. These exports will also be destined primarily to the United Kingdom in fulfillment of bulk purchase commitments.

While official estimates of the 1946-47 wheat acreage or yields are not available at this date, it is unlikely that this year's plantings will exceed 170,000 acres. Assuming average yields on this acreage imports of a little over 3,000,000 bushels would be required to provide approximately 9,000,000 bushels for domestic consumption.

UNION OF SOUTH AFRICA

Present acreages planted to wheat and other cereal crops are estimated as the largest on record and the prospects for the December wheat harvest are excellent. On the basis of present consumption requirements an estimated 3,400,000 tons of cereal grains is needed annually to feed South Africa's population of 11,200,000 as compared with approximately 2,400,000 tons satisfying the prewar needs of about 9,600,000 people. In addition to population increases, South Africa's wartime and post-war food habits have created a demand for increased quantities of food. For the native population, this means a greater consumption of corn and corn products, thus eliminating for the immediate future, at least, any surplus of corn for export. Also, an increased production of wheat and vegetable foodstuffs for consumption by the European population has been stressed.

Food crops harvested to date in 1946 and available for 1946-47 consumption needs reflect only slight increases in stocks of corn, kaffircorn, beans, peanuts and deciduous fruits as compared with the previous drought year of 1945. Even with the receipt of contracted imports of approximately 350,000 tons, supplies are not expected to suffice until the harvest of April 1947 without severe rationing.

The wheat harvest in December estimated at 600,000 tons and almost twice the production of last year will also be short of fulfilling postwar demand. In addition to corn and wheat, other cereal food grains harvested in 1946 such as oats, rye, kaffir, barley and the cereal equivalent of 172,000 tons of potatoes will not total more than around 2,900,000 tons, which is about 500,000 tons less than the estimated food cereal requirements for 1946-47. This shortage may be taken up to some degree by a cereal equivalent of a fairly plentiful supply of vegetables other than potatoes, but for the native population, it is believed impractical to substitute foods to which they are unaccustomed.

Further complications to the food situation are the continued shortages of fats and oils. Butter stocks which were ample for prewar consumption are about 20 percent below consumption needs for 1947, providing a weekly per capita consumption of about 3½ ounces for the European and Asiatic populations. Very little, if any, butter is consumed by the natives. The contemplated manufacture of 12,000,000 pounds of margarine to meet the fat requirements of lower income groups during 1946-47 has been abandoned due to the difficulty of obtaining raw materials. Peanuts provide the native population with their principal source of fats. Local production, which in 1946 amounted to approximately 9,700 tons, has been supplemented each year by substantial imports from Belgian Congo and India. Imports for 1947 will be greatly curtailed from the Belgian Congo because of exports to Belgium, while India's trade has been completely obliterated by its trade embargo on South Africa.

Declines in the production of dairy products and meats are anticipated in 1947 as a result of the effects of 1945 drought and additional decreases in feedstuff allowances during the last half of 1946. Total cattle, hog and sheep slaughterings in 1946 are expected to produce approximately 6 percent more meat supplies than in 1945, as 1946 slaughterings included several thousand cattle marketed from drought regions of both the Union and South-West Africa. Hog slaughterings are expected to decrease about 10 percent in 1947, and it is believed declines will also be noted in the numbers of cattle and sheep marketed for slaughter.

The only significant surplus items of foodstuffs in the Union available for export during 1946-47 will be citrus and deciduous fruits.

UNITED STATES *

The high level of food supplies attained in the United States in 1945-46 is expected to continue during the current consumption year. Production of food crops is establishing new records. The improved feed situation and the large number of livestock on farms indicate a relatively high level of production of livestock food products.

During 1945-46 U.S. civilians consumed about 86 percent of the available food supply, 6 percent was taken by the armed forces, and about 8 percent was shipped out of the country. This year U.S. civilians are likely to consume a substantially larger proportion of the available food supply--perhaps 92 percent.

Military procurement, including supplies for civilian feeding in occupied areas, may drop to as low as 2 or 3 percent of the total food supply. This drop in net procurement for the armed forces will result mainly from demobilization.

Exports of food products through non-military channels during 1946-47 will continue at a high level but are likely to be smaller than in the past year, amounting to perhaps 5 or 6 percent of the total food supplies. In 1945-46 substantial supplies were exported out of military stocks. These are now at a minimum. A larger proportion of the exports in 1946-47 will be though commercial channels as activities of the United Nations Relief and Rehabilitation Administration will be concluded in Europe on December 31 and in the Pacific area March 1, 1947. Various controls for obtaining food for export have been relaxed. Food prices in the United States are at a very high level, any may deter some procurement for export.

The level of food consumption in the U.S. is expected to continue about the same during the next year as in 1945-46 when civilian per capita consumption was about 14 percent above the 1935-39 average. Marketings of fluid milk and cream, eggs, and chicken are likely to be somewhat smaller during the coming year than the year previous. No particular change is expected in the average supplies of meats, fats and oils, fresh vegetables, potatoes and sweetpotatoes, dry beans and peas, frozen fish, turkey, condensed and evaporated milk, cheese, and probably sugar. On the other hand, supplies of wheat products, rice, corn products, citrus fruit, fresh deciduous fruit, canned fruits and fruit juices, canned vegetables, canned fish, and fresh fish, may average a little higher than in 1945-46.

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Cattle slaughter is expected to be very large; pork production is much above prewar, but will be reduced more than seasonally next spring and summer when hogs from the relatively small pig crop from the fall of 1946 reach market weights; lamb and mutton continues the reduction begun 4 years ago. Production of meat in 1946-47 is variously estimated from 21 to 22 billion pounds, nearly as large as in 1945-46. Exports, however, will be much smaller in 1946-47 than in 1945-46. Civilian demand for meat is exceptionally strong and prices are at extremely high levels. Large supplies for export are not available from military stocks as they were in 1945-46 when approximately 1.4 billion pounds of meat were exported. Canned fish exports in 1946-47 will continue high and may amount to about 190 million pounds. Production of eggs may be down 6 to 9 percent from the record in 1945-46. Fewer replacements in layers were made because of the tight feed situation during the spring and early summer of 1946. Therefore laying stocks are smaller. Nevertheless, egg production will be greatly above prewar. Without substantial foreign exports the price of eggs probably will go down to price support levels during the peak production period.

Milk production during the fiscal year 1946-47 may continue near the high level of 1945-46 even with fewer cows on farms. The rate of milk production per cow is setting a new record, and large feed supplies are available for the year ahead. Although butter production may increase slightly from the present low rate, practically none will be exported. The output of condensed and evaporated milk and cheese may be about the same as in 1945-46, but exports will be substantially smaller. Exports in 1945-46 were materially increased by transfers from military stocks. The production of dried whole milk may be down slightly but fairly large quantities will be available for export. Dried skim milk output is continuing at record levels. Plant capacity is high and with large quantities of liquid skim milk available, considerable quantities of the dried product could be made available for export.

Total domestic production of fats and oils in 1946-47 may be moderatly smaller than the year before. Imports are expected to increase, but stocks are very low and cannot be drawn on as they were in the past year. The production of food fats and oils may be about the same as last year, but the exports of food fats will be much smaller. Butter production may increase, but lard production is likely to be down from 1945-46. It is not likely that more than half as much as the 1945-46 exports of 600 million pounds of lard will be shipped this year, principally to Latin America and the U.S. territories. Domestic production of edible vegetable oil products nearly equals the 1945-46 output. Only small quantities will be exported. Linseed oil production will be reduced as will the output of grease; but imports of copra are increasing.

Relatively large supplies of fruits will be available for consumption in 1946-47. This year's apple crop is average in size; marketing of record citrus crop has begun; and more tropical fruit is being imported. Military requirements for canned fruit and fruit juices are substantially smaller so that with large packs, more canned fruit and very large supplies of canned fruit juices will be available for consumption in 1946-47. Exports are not likely to reach prewar levels this year.

The production of vegetables is at a record level. Commercial truck crop production for fresh market is particularly large. Heavy packs of canned vegetables in 1946 will permit record civilian supplies and some exports of canned vegetables. This year's potato crop has set a new record, and plentiful supplies are available for export. The Department of Agriculture has been purchasing substantial quantities of potatoes under the support program in order to carry out statutory commitments on price supports. Production of dry beans in 1946 is about 8 percent below the 10-year average. Exports of dry beans from this crop will be considerably smaller than during the war but much more than in prewar years. These exports will fall short of foreign requirements. Large supplies of dry peas are available from this year's crop, but most of the supplies available for export will be procured by the Army for use in its civilian feeding programs.

The carry-over of wheat on July 1, 1946 was the smallest in 20 years, except for July 1, 1937, but the crop set a new record of 1,169 million bushels. The requirement for the higher extraction rate from wheat to flour was removed on September 1, but the milling restriction for domestic supplies is still in effect. The Department of Agriculture has announced the grain export program for 1946-47. This includes 267 million bushels of wheat of which 17 million bushels is from the old crop. In 1945-46, 387 million bushels of wheat were exported or shipped from the U.S. The heavy export demand for wheat is the principal factor maintaining the price for wheat. The rye situation continues tight because of the short crop and exports will be quite small. The rice crop now being harvested is indicated at 70 million bushels. Civilian distribution may be kept considerably below prewar in order to permit exports and shipments of approximately 35 million bushels.

The 1946 production of corn for grain will exceed 3 billion bushels—a new record. The carry-over of corn, this year, as in wheat, was the lowest since 1937, but the record crop will provide ample supplies for all domestic uses including feed, food, and industrial products. Perhaps 100 million bushels of corn will be exported during the next 12 months if transportation facilities are available. Larger than usual quantities of oats also will be exported—perhaps around 25 million bushels.

Total mainland sugar output in 1946-47 is expected to be 2.0 to 2.2 million tons, raw basis, if the outturn of sugar per ton of beets and cane is about average. Last year 1.8 million tons were produced in the U.S. With world allocations of the short exportable supplies, U.S. domestic supplies of sugar per capita are expected to be about the same as those available in 1945-46.

LATIN AMERICA

Summary

Crop production in most Latin American countries during the year just ended has been materially above that of 1944-45. Exports, however, have been held down by transportation difficulties in Argentina and Brazil. At the same time, there have been increases in domestic demands for foods as a result of the wartime and postwar boom which has been general in Latin America.

For the coming year, greater production of sugar and bananas is in prospect in the Caribbean and Central American region than in the year just ending. Farther south, larger acreages of wheat have been planted in Argentina and Uruguay, and of oilseeds in Argentina and Chile. Because of reverse seasons, spring plantings are not completed in the Southern Hemisphere. Consequently, very little is known as yet about the size of the coming corn crop in Argentina and adjacent areas. Rice production seems to have stopped expanding in most South American exporting countries, except possibly Ecuador. In Chile, some decline seems to be in prospect, and in Brazil prospects for rice as well as corn acreage are down, because of a return to cotton. Otherwise favorable crop prospects for Argentina, Paraguay, and southern Brazil are threatened by early hordes of locusts. It is still too early however, to forecast the extent of damage.

Argentina, the principal food exporting nation of South America, has lately concluded or is negotiating, export agreements with several neighboring countries, including Brazil, Peru, and Ecuador, as well as with England. Negotiations with several other countries are still in progress. As a result of these agreements, there appears to be relatively little wheat or meat left available in that country for free markets.

Exports of grains from Argentina during 1946 have been limited by the short crop of 1945-46. Wheat exports for the calendar year 1946 are estimated as a third less than last year. On the other hand, corn exports, though much below prewar, will be more than 3½ times as great as in 1945. Exports of vegetable oils are running at about the same level as a year ago. Acreage for the coming 1946-47 wheat crop is estimated at 13.5 and flaxseed at 10 percent above last year. Exports of meats, including beef, pork, and mutton, for 1946 are expected to be 10 percent greater than in 1945. Pork and lard, however, are sharply lower than a year ago because of an unfavorable corn: hog price ratio.

Brazil had good food crops during the early part of 1946, partly because of favorable growing weather and partly because of a shift from cotton to rice, corn, and other food and feed crops. Nevertheless, actual shortages of some foods are likely to occur before the end of the current year. The difficulty in obtaining wheat from Argentina has led to the mixing of manioc flour and corn meal with wheat flour. A lack of transportation facilities in Brazil has made it difficult to get supplies from producing to consuming areas. The 1946 rice crop was the largest on record, amounting to about 2.3 million tons of rough rice. Corn production was 7.1 million tons, a quarter above 1945, and production of manioc flour is 10 percent above last year.

Preliminary forecasts place the 1947 Cuban sugar crop at around 5.0 million short tons. Most of the exportable surplus will go to the United States under the new sugar agreement. Production of fresh vegetables and of fruit will probably be well above last year's outturn. Cuba, however, has been having serious shortages of rice as well as of wheat flour, edible oils, lard, and soap fats.

Food supplies in Mexico in the consumption year 1946-47 will be materially above those a year earlier. The corn crop is about 25 and the bean crop about 20 percent greater than in 1945. Wheat production was about the same as last year but less than half of consumption requirements. Imports of over 450,000 short tons would be consumed in 1946 if available. Supplies of fats and oils are very short. Mexico would apparently import about 35,000 tons of fats if that much could be obtained, and will probably import 100,000 to 110,000 tons of sugar under an agreement recently made with Cuba.

Mexico

Food supplies in Mexico during the 1946-47 consumption year will be materially larger than in 1945-46. In the earlier year, crops were cut sharply by the drought of 1945, while Mexico, like other countries, had great difficulty in obtaining imports to supplement short supplies at home. In contrast, the 1946 growing season was relatively favorable, though dry weather during July and August cut crop production in some northern areas.

Corn is the most important single food crop in Mexico. The 1946 crop is estimated at 2.6 million short tons, which is somewhat above normal. This crop is nearly a quarter larger than the short crop of 1945. At the beginning of harvest this year Mexican stocks of corn were extremely low. Consequently, imports estimated at about 220,000 tons will be needed to reestablish stocks and fill consumption requirements until the early corn crop becomes available in 1947.

Mexico's consumption of wheat in recent years has been about 800,000 short tons of which about half was imported as wheat or flour. The 1946 crop is estimated at 410,000 short tons, or about the same as the year before.

The 1946 rice crop was about equal to that of 1945. Rice consumption in Mexico has increased materially over that in 1935-39, and additional rice would be imported if it could be obtained abroad. Efforts to obtain imports, however, have had but little success in view of the shortage in the Far East.

Beans are an extremely important food crop in Mexico and the current large crop has materially eased the food situation. Shortages which existed several months ago have now been overcome except in a few localities in the northern part of the country. It is expected that about 4,000 tons will be available for export.

About 40 percent of the chickpea crop consists of varieties suitable for human food. The rest is used for feed. Most of the food varieties are shipped out of the country. Exports from the 1946 crop will amount to some 40,000 to 45,000 tons. According to an agreement with Cuba about half of the exportable supply will be taken in exchange for sugar.

The 1946 potato crop is adequate for domestic consumption, but some imports of seed potatoes will be needed early in 1947. Production of tomatoes, peas, and garlic for consumption and export will probably be slightly below 1945-46. Production of other fresh vegetables, however, is expected to be larger than a year ago, largely because of anticipated larger acreage, and should lead to greater shipments to the United States during the coming winter.

The fruit crop is larger than a year ago and except for bananas materially above prewar. Banana production is estimated at 507,000 short tons, slightly above 1945. Exports to the United States should be materially greater than in 1945-46. A record breaking pineapple crop was harvested during 1946 and an even larger production is expected for 1947. The 1946 crop of citrus fruit is about the same as a year ago, while apples, peaches, pears, and grapes are above 1945. Production of the deciduous fruits is nearly two-thirds above prewar, but with strong demand, they will continue to be imported.

Mexico has been trying to increase its production of sugar, since it consumes about 550,000 tons of refined sugar per year but produces only about 440,000 tons at present. A setback to this program occurred a few months ago when one of the larger mills was damaged by fire and some 16,000 tons of sugar was destroyed. Production for 1946 is expected to be about equal to that of last year. Imports of 100,000 to 110,000 tons will be needed during the consumption year.

Supplies of fats and oils in 1946 have been substantially below the effective demand, and stocks are extremely short. Lard production is around 30,000 tons. Production of vegetable oils from cottonseed, sesame, and other oil crops is about equal to that in 1945. Imports of approximately 35,000 tons will be wanted for the consumption year August 1946-July 1947.

Meat supplies during 1946 have been equal to the demand at present high prices. Pasture conditions were much improved over 1945, resulting in ten percent larger beef production. Pork supplies were somewhat short because of the small corn crop in 1945 but should improve this year.

Since the beginning of World War II the population of Mexico has increased at an estimated rate of nearly two percent per year. Thus, that country would need 15 percent more food than in 1935-39 to maintain the same supply per person. Food production has increased faster than the population, but the high level of industrial

MEXICO: Production and Net Imports of Principal Food Products, in 1935-39, 1945 and Estimated Production and Trade, 1946

Item	Production (1,000 short tons)			Net Imports a/ (1,000 short tons)			
						First six months	
	1935-39	1945	Prelim. 1946	1935-39	1945	1945	1946
Corn	1,891	2,094	2,590	1	54	48	10
Wheat	428	410	408	1/ 43	1/ 361	1/ 135	1/ 143
Rice	59	90	90	- 13	2/	2/	2/
Beans	129	160	193	- 1	- 7	- 2	- 1
Chickpeas	55	110	115	- 33	- 11	- 6	- 21
Potatoes	76	138	143	1	4	2/	2
Tomatoes	75	258	246	- 26	- 114	- 101	- 87
Bananas	688	490	507	- 338	- 87	- 4	- 3
Pineapples	41	84	94	- 7	- 11	- 5	- 13
Sugar (raw)	364	439	460	- 1	4/ 102	4/ 54	4/ 52
Hog Lard	26	29	30	2	23	8	20
Vegetable Oils	51	101	101	0	2/	--	3/
Beef	249	231	258	0	5/ 1	2/	1
Pork	86	96	112	--	--	--	--

a/ Minus signs (-) indicate net exports.
1/ Including flour in terms of grain.
2/ Less than 500 short tons.
3/ Net exports of less than 500 short tons are forecast for 1946.
4/ Imports of refined and crude without converting.
5/ Fresh and conserved meats of all kinds.

activity and inflationary influence have increased per capita consumption.

The 1946 wheat crop is actually smaller than that in prewar years and per capita production has fallen by approximately 20 percent. This means that there is a correspondingly larger need for wheat imports. In the case of corn and rice, on the other hand, production has increased faster than population. Per capita production of beans and of rice are about 30 percent above prewar, while corn is 20 percent, and refined sugar 10 percent above 1935-39. Beef production per capita has fallen 10 percent, while hog production is about the same as prewar. Among fruit crops, production of bananas per capita has dropped nearly a third, while pineapples and deciduous fruits have increased materially.

Cuba

Assuming a continuation of favorable weather, prospects for Cuban food production for the remainder of 1946 and early 1947 are improved as compared to those of a year ago. Acreage of several food crops have been increased and preliminary forecasts place the 1947 sugar production at about 5.0 million short tons. The major share of the exportable surplus of this crop, as well as that for 1946, will go to the United States under the new sugar agreement.

Cuba is normally dependent upon imports for about one-third of its food supply but exports about 90% of its sugar crop and large quantities of winter vegetables, and fruit. Corn, peanuts, rice, root crops, coffee, meat, and dairy and poultry products are raised primarily for domestic consumption. Imports of such important items as wheat flour, rice, lard, beans and peas and edible oils are made to supplement domestic production.

Imported items were scarce during the war years and continue to be scarce during 1946 with stocks of some items the lowest on record. Shipping conditions have improved since the war but the increased domestic purchasing power of Cuba and continued world scarcities have been instrumental in reducing stocks and increasing domestic demands. The Cuban government is facilitating imports and trying to check soaring domestic prices of some of the scarcer items such as flour, lard and rice. High prices coupled with a strong consumption market are encouraging plans for increased acreages of food crops for harvest in 1947.

The recent agreement whereby the United States will purchase the major part of the 1946 and 1947 Cuban sugar crop and substantial quantities of molasses at prices favorable to that country, has stimulated efforts towards greater sugar production. Production of raw sugar for 1946 is now estimated at 4,476,000 short tons which is well above the 1945 production of 3,923,000 tons and the prewar average of 2,734,000 short tons. If the weather remains favorable until harvesting begins about January 1, the crop should be about 10 percent larger in 1947 than in 1946.

Cuba's winter vegetable crop consists chiefly of tomatoes, cucumbers, eggplant, green peppers, okra and lima beans. Plantings for 1946-47 except perhaps for cucumbers, are expected to be somewhat larger than last year. Exports of vegetables should be in line with prewar levels depending mostly upon competition with the Florida and Mexican crops, and on whether there is sufficient refrigeration service to New York.

Pineapples, bananas and grapefruit form the bulk of Cuba's fruit exports. The 1946 pineapple production has reached record proportions and prospects are good for an even larger output next year. Exports should be about 86,000 short tons in 1946 as compared to 72,000 in 1945. Bananas and plantains marketed for consumption and export this year are estimated at 50% above 1945.

The two major food imports rice and wheat flour have fallen far behind increased domestic requirements. Local consumption of rice next year will apparently be limited primarily by availability abroad rather than by internal demand. Present outlook is that local disappearance in 1947 may not be greatly different from recent average monthly consumption of 21,000 short tons.

Consumption of fats and oils is also limited by availability of supplies, most of which must be imported. Soap fats are now extremely scarce and an acute shortage of lard is expected about November 1. Supplies may continue short until slaughterings increase in the United States.

Adequate rains have improved pastures and cattle weights are responding accordingly. Supplies of protein feeds, though, are still acutely short because of low imports. Milk production for 1946 has been lifted to well above the 1945 level. Imports of canned milk have been heavy to augment domestic supply and requirements have been filled during the summer rainy season when domestic production was heaviest. A severe shortage of both canned and fresh milk, however, is expected this fall and winter. Production of eggs, which decreased in 1945 because of the drought, is expected to increase due to stimulation of high prices both for eggs and poultry.

Other Caribbean and Central American Countries

Estimates of over-all production of food crops for 1946 in the Dominican Republic, Haiti, Puerto Rico, and British and French possessions show an increase over 1945 and prospects for further increases in 1947. The 1947 sugarcane crop is in good condition except in Haiti where below normal rainfall persists. Production of sugar for all of the Islands in 1946 is estimated at about 2,000,000 short tons. Increased production in 1947 is forecast for Puerto Rico, Dominican Republic, and Jamaica, where about 75 percent of the total crop for this area is produced.

The Dominican Republic raises most of its own staple crops and exports some rice, beans, corn, vegetables and fruit to the other Islands. Haiti also exports corn and other foods to the neighboring Islands. Both of these Republics, though, must import quantities of flour and edible oils, and have not been able to obtain sufficient supplies during the past year. Banana production and exports for the Islands are increasing with restoration of shipping facilities. In prewar years Jamaica was the principal producer among the Islands, exporting 23 percent of the Caribbean and Central American total. It is now slowly recovering from the effects of Panama disease and loss of markets abroad. Production in 1946 was about half of prewar volume, but some increase is expected for 1947. Banana production is also increasing in Haiti and the Dominican Republic. In Haiti exports from October 1945 through June 1946 were a third greater than in the same period in 1944-45.

The food supply situation in the Central American countries also was better in 1946 than in 1945 and may improve somewhat further in 1947. Nicaragua may be an exception, however, because of the drought which hit this country during the summer months, reducing its production prospects. Banana exports are expected to continue to increase though winds in July caused some damage to plantations on the west coast of Guatemala. There are prospects of increased cacao exports from Costa Rica and Panama. Production of such staple foods as corn, and beans, is about sufficient for the area, but imports of wheat flour, rice, fats and oils and some sugar continue to be necessary.

Argentina

On the basis of the second official plantings estimate for 1946-47, wheat acreage is almost 14 percent greater than a year ago and flaxseed 10 percent. The wheat acreage is still 17 percent below prewar average, and flaxseed 32 percent. Acreage sown to oats, barley, and rye, however, is somewhat larger than a year ago and much larger than prewar.

Exports of corn, oats, barley, rye, beef, and mutton to date have exceeded shipments during the corresponding period of 1945, but exports of wheat, flaxseed, pork and lard have been smaller in volume. Both wheat and corn exports are still considerably below prewar figures, but exports of barley and rye are exceeding prewar.

The Argentine government is controlling all exports and reserving supplies for domestic consumption in an effort to keep prices low at home. Some supplies have been withheld because of failure of agreement on prices. A number of agreements have been made with other countries for exchange of commodities.

Agricultural exports for the year to date have surpassed the level reached during the same period in 1945, but the movement of a number of commodities has not been as large as the supply would appear to permit. This is due primarily to governmental control of exports, and secondarily, to port labor and interior transportation difficulties. Official control over exports has increased during the year. As a result of difficulties in obtaining export permits, many ships remain in port overtime and some have departed without a load.

The chief purpose of export control has been to provide an ample local supply at reasonable prices. For several months there has been a government-fixed-price of $2.84 per bushel (U. S. currency equivalent) for export wheat delivered beside ship in Buenos Aires. The export prices of other grains, which are free of price-fixing, have declined in the last three months because of large crops elsewhere.

The population of Argentina has increased by about 13 percent since 1937. Consequently, to maintain the same supply per person about 13 percent more food is needed. Per capita production of several commodities is below prewar, and as a result, exports of them are smaller than at that time.

Wheat production of the 1945-46 crop 1/ was one-third less than the annual prewar 2/ outturn, and 200,000 short tons less than the 1944-45 crop. The last two crops were both seriously affected by drought. Exports for the first eight months of 1946 were 1.3 million tons against 2.0 million tons in the corresponding period of 1945. Estimated total 1946 wheat exports are 1.7 million short tons, as compared to 2.6 million in 1945, and are only about half of prewar.

The second official estimate of area planted to wheat for the 1946-47 crop is 16.2 million acres. This represents an increase over the 1945-46 crop of 13.5 percent, but a decrease of 16.5 percent from average prewar acreages. On the basis of average yields and average abandonment, the 1946-47 crop should yield about 6.0 million short tons.

It is too early for an estimate of corn acreage. Corn plowing and planting, however, is progressing satisfactorily, with favorable soil moisture and weather. A severe locust infestation is anticipated which, if it materializes, may cut production of corn and other crops.

Flaxseed production in 1945-46 was greater than in the previous year but considerably below prewar. The estimated area planted to

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1/ All 1945-46 production figures in the Argentine section are the third official estimates.

2/ Prewar, throughout the Argentine section, refers to the period 1936-40.

it for the 1946-47 crop is 5.0 million acres which is 10 percent above the 1945-46 area though 32 percent below prewar. Flaxseed exports during the first eight months of 1946 were below the corresponding 1945 figure. During the first 8 months of 1946, vegetable oil exports (chiefly flax and sunflowerseed) totaled 105,000 short tons as against 103,000 tons during the corresponding period in 1945.

Total meat exports in 1946 will exceed 1945 shipments, but the outturn of pork and lard is sharply lower (See table). The latter is the result of the disparity between corn and hog prices caused by heavy demand for export cereals. This price inequality, however, is decreasing because of declining corn prices and rising prices of pork and lard. Lard exports for 1946 probably will be no more than half of the 55,000 short tons shipped in 1945.

On October 1, 1946 Argentina and Great Britain entered into a new meat agreement. The British have agreed to buy 83 percent of the Argentine exportable surplus of meat during the year starting on the above date and 78 percent the following year. Quantities will be set later for two additional years. Argentina was granted an average increase in meat prices of approximately 7.5 percent over the existing price. This is an increase of about 45 percent over the prices received in 1939.

ARGENTINA: Production and Exports of Major Food Commodities, 1946 with Comparisons

Product	Production by crop years: 1936-40	1944-45	1945-46	Exports, calendar years: 1936-40	1945	Est.1946	First 8 months 1945	1946
	Thousand short tons			Thousand short tons				
Wheat	6,653	4,503	4,307	3,619	2,598	1,700	2,045	1,276
Corn	8,456	3,269	3,939	5,551	631	2,300	376	1,643
Oats	802	1,211	879	340	90	330	29	257
Barley	542	631	922	300	294	730	164	543
Rye	273	209	322	131	148	147	99	133
Flaxseed	1,667	867	1,063	--	--	--	57	41
Beef and Veal	--	--	--	--	--	526	--	--
Pork	--	--	--	--	--	94	--	--
Mutton and Lamb	--	--	--	--	--	190	--	--
Total Meat	--	--	--	--	725	810	--	--

Brazil

Despite the fact that Brazil harvested good to record food crops during the spring and early summer of 1946, it appears likely that actual shortages of some foodstuffs will occur by the end of the year. A sharp decline in wheat imports has reduced food supplies for urban areas and has upset the normal consumption pattern, causing a heavier utilization of other grains and staples. The lack of adequate transportation facilities to move supplies from producing areas is also causing shortages in deficit areas. To aid in conserving supplies for northern and central Brazil and certain urban centers, an export embargo was placed on foodstuffs on August 23, 1946. Additional supplies are needed to halt the steadily rising cost of living as well as to prevent a recurrence of food riots such as that which took place in September in Rio de Janeiro.

It now appears certain that the cotton acreage for next year's harvest will be expanded considerably due to prevailing high prices and the world demand for this fiber. This expansion is expected to reduce the planted acreage of corn and upland rice, both of which were produced in record volume in 1945-46. If larger wheat arrivals are not forthcoming, the food situation may be further aggravated in 1947.

The crux of the deteriorating Brazilian food situation is the acute shortage of wheat. Arrivals of this grain for the first three-quarters of 1946 were only around half of those for the same period of 1945. Usually about 1.1 million short tons of wheat are imported annually. Domestic production is small, furnishing only 10 to 15 percent of requirements. The central and northeastern areas, particularly the latter, have been the most affected. To extend wheat flour varying percentages of corn, rice and manioc meals and flours are mixed with wheat flour. Real relief may not be forthcoming until after the next Argentine harvest. Argentina normally supplies over 95 percent of Brazilian wheat imports.

Brazil's transportation system is inadequate to move sufficient food supplies from producing to urban centers. The overburdened railroads need extensive rehabilitation; further, lines do not extend in many important surplus areas. Roads are limited. Coastwise shipping facilities are inadequate to move all required supplies from producing areas, particularly Rio Grande do Sul. Thus, although certain commodities are needed in central Brazil, they will be exported because of lack of means to move them to domestic markets.

The cost of living in Brazil reportedly rose between 150 to 200 percent from 1939 to 1945. For the first seven months of 1946 the cost of living in Rio de Janeiro and Sao Paulo increased another 14 percent. Although price controls exist, in practice only a small amount of success has been realized in preventing inflationary price movements. Further, neither has the move, introduced in May, to use Army facilities to improve the food supply produced any large scale permanent improvement.

These circumstances along with the scarcity of wheat helped to bring about the export embargo effective August 23. Prior to this move the government issued export licenses with caution retarding both sales and movement. Present indications are that rice and some meats may continue to be exported from Rio Grande do Sul, but in all instances foreign movement will be delayed until the government is assured that a surplus of a given commodity exists. The export embargo will curtail the expected volume of rice, bean and corn exports to a considerable extent.

In 1946 Brazil harvested the largest rice crop on record, with production estimated at 2,600,000 short tons of rough rice compared to the 1945 output of 2,315,000 short tons. Export of rice for 1946 are now estimated at about 170,000 short tons of milled rice which is materially less than previously anticipated. At present, shipments are confined to Rio Grande do Sul and are limited by inadequate port facilities and transportation. Whether or not shipments will be made from central Brazil is dependent on the future supplies of wheat flour. The estimated plantings of the 1947 crop of upland rice are considerably reduced due to the highest prices for cotton on record. The continuation of the Emergency Plan, however, may be effective in reducing the contemplated shift in crops.

Corn is produced in all states of Brazil and ranks as the number one crop in terms of acreage. Like rice the 1946 production of corn was the largest recorded, totaling 7,076,800 short tons compared with 5,592,000 tons in 1945. Total exports for 1946 are expected to reach around 55,000 tons. Unlike many of the Latin American countries where corn is a major item in the diet, in Brazil the bulk of the crop is normally fed to livestock. With the shortage of wheat, however, corn meal has been used more extensively for human consumption.

Bean production for 1946 amounted to 981,000 short tons as compared to 987,000 tons in 1945. It is believed that approximately 85,000 tons will be exported this year. Consumption of this legume in recent years has averaged about 935,000 tons annually. Indications are that the acreage planted to beans this fall will be about the same as last year. And if growing conditions are normal, the 1947 crop will be as large, or larger, than the 1946 output.

A strong domestic demand for fats and oils continues in Brazil. While supplies usually have been adequate to meet minimum edible requirements, in certain areas actual shortages have developed. Consumer rationing was begun in Sao Paulo on July 12, 1946 to prevent a possible shortage. Supplies for 1946 are probably somewhat smaller than 1945 due to a smaller cottonseed production and an outbreak of hog cholera which reduced the amount of lard produced. These reductions will be offset somewhat under the new babassu agreement whereby Brazil will take 50 percent of the production in place of a former 25 percent. The edible oil situation for the coming year should show some improvement with larger supplies of cottonseed being available for crushing.

Beef production in 1946, on a fresh meat basis, is expected to total about 855,000 tons compared with the 1945 output of 827,000 tons. Exports for this year will probably reach 110,000 tons or the same as 1945. Approximately one-half this quantity has already been exported in the form of canned meat and dried beef (xarque). Practically all of beef exports have originated in southern Brazil; shipments from the central part of the country have been prohibited for the last six months. Fresh pork production for 1946 of 232,000 short tons compared with 243,000 tons in 1945. This year's production of lamb is estimated at about 15,000 tons compared with 17,000 for last year.

Despite an expected meat shortage lasting from October to January in urban centers of Brazil, exports of fresh and canned meats from Rio Grande do Sul will continue. Brazilian coastal shipping vessels are not equipped to handle the transport of frozen beef.

Brazil is experiencing a boom in the export of manioc flour. Competitive bidding doubled the price of manioc flour early this year, which caused many of the small mills to increase production. The output of manioc flour in 1946 is estimated at 1,410,000 tons and in 1945 at 1,290,000 tons. Manioc flour and meal is a ranking staple in the Brazilian diet. Exports of manioc flour may reach 55,000 tons in 1946.

Sugar production for 1946 is estimated at 1.3 million short tons, slightly less than 1945. The 1946 orange crop is about 23 million boxes. The citrus industry is suffering from further losses of trees due to rootlet rot. Exports of oranges from Sao Paulo are now moving to Europe.

Over the past 10 years total Brazilian production of basic food staples has increased by approximately one-third. Brazil's population in 1946 is believed to be around 45.8 million, which is about 12 to 14 percent above 1935-39. Thus the per capita production of food supplies available for consumption, is approximately 15 to 20 percent larger than before the war. The per capita increase in consumption is largely attributed to the economic boom caused by the war.

Chile

The Chilean food situation is about normal except for acute shortages of fats and oils and sugar.

Wheat production in 1945-46 was 1,025,000 short tons against 1,000,000 tons the previous year. The first estimate of area planted for 1946-47 is 1.9 million acres which is 75,000 acres above last year. Rice production in 1945-46 was 130,000 short tons of rough grain against 177,000 the previous year. Plantings for 1946-47 are estimated at 104,000 acres compared to 118,000 the previous year. Rice exports in 1946 will probably total 33,000 short tons against 47,000 in 1945. The production of oats and barley has been below average this year, but sizeable exports have been made nevertheless.

Bean production amounted to 81,000 short tons in 1946 against 78,000 in 1945. Exports are expected to total 33,000 short tons compared to 42,000 last year. Lentil production is 19,000 short tons this year and 14,000 tons last year, while exports probably will come to 12,000 this year against 11,000 previously. The first estimate of 1946-47 plantings is 43,000 acres as against 38,000 a year ago. The sunflowerseed crop in 1945-46 was 19,000 short tons against 32,000 last year, but the estimated area sown for 1946-47 is 57,000 acres, which is almost double the area a year ago. Large imports of sunflowerseed, as well as of sugar, are continuing.

Chile continues to import about 8,000 head of cattle from Argentina monthly. Exports of 14,000 short tons of mutton and lamb are in view for 1946 compared to 10,000 tons in 1945.

Peru

Peru's consumption demand for wheat and flour has mounted steadily from an estimated 220,000 short tons in 1935 to nearly 330,000 tons at present. Meantime, production has been declining, and was only about 94,000 tons annually in 1945 and 1946. Area planted for 1946 is estimated at 250,000 acres, representing a continuation of the decline from 338,000 acres in 1939. During 1946 expected imports from Argentina did not fully materialize and shipments from the United States have been required repeatedly to avert crises. Consumption of wheat flour has been restricted by establishment of quotas for Lima and the provinces.

Rice consumption has approximated 110,000 tons annually in recent years, and the demand has been increasing along with the growth in population. Production for 1946 is estimated at 132,000 short tons of rough rice, compared to 121,000 last year. Bean production is about equal to that in 1945, amounting to roughly 132,000 tons. About 5,000 tons will be available for export. Production of sugar amounts to about 475,000 short tons, or very nearly the same as a year ago. Around 310,000 tons will be available for export.

Peru depends for her fats and oils upon domestically produced cottonseed oil and hog lard, and on imported lard from

Argentina and the United States. Edible cottonseed oil is estimated at 9,000 short tons, slightly above last year, while production of hog lard is much lower than a year ago.

Uruguay

The 1946 food situation in Uruguay has been critical. Production has been below 1945, and continuing short wheat crops have necessitated large imports. The rice and potato crops, however, are above normal and are being used as a substitute for bread grain.

In 1943 there was a heavy liquidation of cattle, and since then, cows have been held back on farms and herds built up, with a resulting reduction in numbers slaughtered. Partly as a result of this, meat exports have continued to decline and are estimated on a carcass weight basis at only 96,000 short tons in 1946, as compared to 128,000 short tons last year.

Wheat production in 1945-46 was 240,000 short tons as compared to 200,000 tons the previous year. Nevertheless, the entire 1945-46 crop was consumed domestically by about mid-year 1946. Imports were required to supplement the supply; and since Uruguay had difficulty in obtaining wheat from Argentina, shipments were made from the United States. Estimated plantings of the 1946-47 crop are about 10 percent greater than in 1945-46 but are still below normal. Since 1941, the acreage sown to wheat has declined considerably, and since 1943, yields have been poor, chiefly because of drought. By 1946, stocks had been consumed, which necessitated heavy imports, whereas in prewar years Uruguay exported this grain.

Rice production in 1946 totaled 32,000 short tons of rough grain. This exceeded 1945 by 9,000 tons and was double prewar production. Only a small exportable surplus is available, however, because rice is being used as a substitute for wheat. Sunflowerseed production in 1945-46 is 39,000 short tons against 42,000 tons last year. The current potato crop is about a third larger than the last.

Other South American Countries

Rice production in Ecuador for 1946 is estimated officially at 127,000 short tons of rough grain as against 71,000 tons in 1945. Approximately 51,000 short tons of milled rice will be available for export in 1946, and 33,000 tons were exported last year. Sugar production this year will probably total 40,000 short tons, 10 percent above 1945. This should remove the need for sugar imports in 1947. Area planted in cane has expanded from 19,000 acres in 1945 to 25,000 in 1946. Somewhat larger acreages both of cane and of rice are in prospect for 1947. Wheat production in 1946 is estimated at 28,000 short tons. This nearly equals the 1945 outturn, but it is only a little over half the total requirement.

A drought in northern Colombia has reduced the corn crop in the coastal area of that country, but wheat shortages have been alleviated by imports from Argentina and Canada. An uptrend in banana exports indicates possible revival of the banana industry.

Bolivia, highly dependent upon food imports, continues to experience a shortage of wheat, beef, vegetable oils, and dairy products. Failure to receive desired imports from Argentina and traffic congestion in the Pacific port of Arica have resulted in food scarcities.

Paraguay is harvesting a record sugarcane crop, and plantings of the 1946-47 crops are now under way. Larger than usual acreages are anticipated because of favorable prices. A newly created governmental agency is fighting locusts which are prevalent in large numbers.

SITUATION BY COMMODITIES

GRAINS

World production of the principal grain crops in 1946 is expected to be substantially above last year's reduced harvests and may approach the prewar average in total. The world-wide depletion of grain reserves from previous crops and reduced supplies of other types of food products, however, has offset to a considerable extent the larger harvests so that supplies available for food and feed show only a moderate change from a year ago.

Requirements

Stated import requirements of breadgrains, and of coarse grains for use as food continue very large. When requirements of grain for animal feeding are added, the deficit promises little relief from present conservation measures in most areas if another emergency is to be avoided in the later months of the crop season.

Despite increased production, world demand for cereals promises to exceed prospective supplies because of several factors. Primarily, wheat and coarse grains will have to take almost the full impact of the rice deficit in the Far East and of the general food shortage in other areas. Even at present prices, wheat is the cheapest bulk food available. In addition, the "pipeline" must be filled in order to assure efficient and dependable operation of distribution and rationing systems. Normal working stocks in all areas are again desired in order to avoid day to day problems of supply and distribution. Economic reconstruction of war-torn areas also will depend to a large extent on adequate supplies of food for workers. Finally, there is an insistent demand for feedgrains for livestock. This demand reflects the urge to restore a better food balance and will tend to limit the availability of coarse grains for human food.

Supplies

Developments which have occurred since July have tended to confirm earlier estimates of a sizable deficit in cereals during the coming year. The location of 1946 grain harvests by countries and areas is a very important factor affecting export supplies and import demand for the respective grains this season.

A considerable part of the increase in world production of grain in 1946 is accounted for by large crops in the United States and Canada, but surpluses of wheat available for export from North America will be much less than last year. Transportation difficulties will limit the movement in both countries. Extensive frost damage and unfavorable harvesting weather in important wheat producing areas of Canada have lowered the quality of the crop and reduced exportable surpluses from earlier expectations. Moreover, the amount of corn available for export from the United States in 1946-47 will be a very small part of the total crop.

In the United Kingdom and northwestern Europe, where large imports of grain will be needed, unfavorable weather conditions have delayed harvests and reduced the quality of grain. In the normally surplus regions of the Danube basin, drought has seriously damaged corn and summer crops. As a result, very little grain will be available for export from those areas.

Breadgrains

Production of wheat in 1946 is expected to approach the prewar average of 5.9 billion bushels, and will be well above the 1945 total of about 5.1 billion bushels. If present prospects are realized, the world wheat crop this year will be the largest since 1940. The largest increase over a year is noted in the European total where drought reduced the 1945 harvest in the Balkans and in the Mediterranean countries. Substantial increases over a year ago are in prospect, however, in all areas.

Of the principal exporting countries, another record wheat crop of 1,169 million bushels has been harvested in the United States--exceeding the previous all-time record reached last year by an estimated 46 million bushels. Latest estimates of the wheat harvest in Canada place the 1946 crop at 441 million bushels, 44 percent above the 1945 production. Exportable surpluses of wheat from these countries will be about one-third less, however, than the record movement of 760 million bushels during the twelve months ended July 1, 1946. Approximately one-half of last year's exports of wheat from North America came from carry-over stocks. Transportation difficulties and the maritime strikes are limiting factors in the export position as well as reduced surpluses.

Wheat Production and Stocks in the Principal Exporting Countries

Country	Average 1935-39	1945	1946 1/
	Million bushels	Million bushels	Million bushels
United States	759	1,123	1,169
Canada	312	306	441
Argentina	222	144	2/ 200
Australia	170	144	2/ 160
Production	1,463	1,717	1,970
July 1 stocks (4 countries)	457	824	378

1/ Preliminary.
2/ Tentative estimate of crop to be harvested Nov. 1946-Jan. 1947.

In the Southern Hemisphere the season is not far enough advanced to judge accurately the prospective wheat harvest. Preliminary estimates place the crop in Argentina at around 200 million bushels, well above last year but somewhat below the prewar average of 222 million bushels. In Australia, severe drought has reduced prospects in northern New South Wales so that the crop is now expected to exceed last year's production of 144 million bushels by only 10 or 15 million.

If present production prospects are realized, exportable surpluses of wheat from the new crops in Argentina and Australia may exceed last year's total by only 40 to 50 million bushels.

Elsewhere, even with the production of wheat well above a year ago, many normally surplus-producing areas have indicated that imports of wheat will be needed to meet the 1946-47 cereals requirements. Drought, affecting corn and summer crops in the surplus regions of eastern Europe, has reduced the availability of wheat for export from those areas. In North Africa cereal production is below normal because of reduced acreage. Only in Turkey, where a record harvest is reported, and in other areas of the Middle East, will any significant amounts of grain be available for export.

World rye production in 1946 is indicated to be about 1,450 million bushels. The crop, at that figure, would be about 16 percent below the 1935-39 average, and only about 5 percent larger than the small outturn a year ago. Most of the increase, compared with last year's production, was reported for relatively unimportant rye producing countries. A slight increase from last year's small crop is indicated for central Europe, but the outturn in that important rye producing area is still considerably below average, particularly in Germany and Poland. The crop in Soviet Russia is believed to be little changed from that of 1945.

World trade in rye will, of course, be a very small part of the total movement of breadgrains. In prewar years the Soviet Union and Poland accounted for a substantial part of total rye exports. During the coming year, however, it is expected that Argentina will offer the principal source of rye for export. The seeded acreage of rye in Argentina is the largest since 1943, and average yields on this acreage would result in above-average production. Last year (1945-46) about 9.2 million bushels of rye were exported from Argentina. Very little rye will be available for export from Canada and the United States in 1946-47.

Coarse Grains

Although quantitative estimates of world production of corn in 1946 are not yet available, indications are that the total may exceed that of any previous year. A record-breaking crop of 3,374 million bushels was indicated on October 1 in the United States, and this total, together with favorable prospects in many other areas, is expected to more than offset the reduction caused by drought in the important corn-producing countries of the Danube basin. Production of corn in the United States usually accounts for about one-half of the world total. This year, however, the United States crop may account for more than 60 percent of the total. The high point in world production of corn was reached in 1943 when 5,380 million bushels were harvested.

The prospective increase in production will serve to supplement the total quantity of grain available for use as human food, although the use of corn and other coarse grains as a direct substitute for wheat is limited. The United States has announced a grain export program of 400 million bushels for 1946-47, including corn, the bulk of which will move later in the crop season. Exports of corn from Argentina in 1946-47 are expected to considerably exceed movement during the past season which totalled only about 45 million bushels. In prewar years, however, exports of corn from Argentina averaged well over 200 million bushels.

World production of oats and barley in 1946 is expected to exceed that of a year ago, and will approach the prewar average production. Quantities of these grains moving into world trade during 1946-47, however, will be a relatively small part of the total production. Argentina is the principal country with a surplus of both grains this season. Iraq and Turkey also will have a surplus of barley, with Canada and the United States having some oats for export.

RICE

Present prospects indicate that the 1946-47 world rice crop may be about 10 percent larger than the estimate of 6,300 million bushels for the 1945-46 harvest, but only from 90 to 95 percent of prewar. The anticipated increase will be due primarily to a larger production in Asia. The reduction of 5 to 10 percent below prewar output is expected to result in a continued critical rice shortage during 1947 in most countries, as (1) exportable supplies from the 1946-47 harvest are expected to continue far below the prewar volume, and (2) rice stocks at the outset of the season are at an extremely low level, particularly in the heavy importing and consuming countries of the world.

China's crop is expected to exceed slightly that of last year, but to be about 10 percent less than the 1935-39 average production. India's planted acreage is at a high wartime level. Crop conditions to date have been somewhat above last year when yields were below average. Unless the fall monsoon again fails, the harvest in that country should exceed last season's below-average outturn and be larger than prewar. Japan's crop is reported as one of the best in years, but in June Korea's was adversely affected by floods. The Philippine rice acreage is reported to be little if any above last year's, which was 80 percent of prewar.

Despite an increase over last year in acreage planted in the world's major prewar surplus rice region, Siam, Burma, and French Indochina, its harvest will be far short of prewar. Last year the acreage of these countries averaged only about 50 percent of prewar. In 1946-47 they are estimated to be from 55 to 80 percent of average, and yields likely will be less than under prewar conditions. Lack of rain in Siam prevented sowing the intended acreage and is expected to reduce yields. In other areas where acreage is expanded, lack of work stock has hampered proper preparation of the soil and yields on the new acreage are likely to be below normal.

Europe's 1946 rice crop will be larger than in 1945, but substantially below that of prewar years. Europe imported practially no rice in 1946 compared with about 2,000 tons in prewar. In view of the heavy demands on exporting countries, no large imports into Europe can be expected in 1947. In Africa, Egypt's 1946 production may be smaller than the 1945 outturn.

It is too early to forecast the rice acreage of the Western Hemisphere during the 1946-47 season. That in the United States is slightly larger than last year. With unfavorable weather early in the season, however, estimates of the crop are below last year's record. The acreage of some of the principal areas of South America may be large, although there may be some decline in acreage in the exporting countries, depending on prices of rice and other field crops at the time of planting.

The quantity of rice available for world trade during 1947 is expected to continue at about the extremely low level of 1946, when exportable supplies were estimated at only 25 percent of prewar average exports. While the average 1935-39 international trade amounted to 8.6 million tons, exports during 1946 are estimated at about 2.2 million tons. The total export supplies in 1947 from the small crops and reduced stocks in Asia's surplus countries, together with surpluses from other parts of the world, are not likely to exceed that amount.

SUGAR

World production of sugar in the 1946-47 season is tentatively estimated at around 30 million short tons raw value or about 10 percent more than was produced in 1945-46 but about 13 percent less than the 5-year 1935-39 average. The final outturn of the current crop depends on a number of factors, the more important of which are climatic conditions, price considerations, and the availability of labor and production facilities in some of the more important producing areas.

In 1946-47, as in the season just closing, it will not be possible to increase supplies of sugar for consumption to any appreciable extent by draining on carryover stocks, because these stocks have been reduced in earlier years to dangerously low levels. In fact, it is probable that some of the current season's output will be required to replenish operating stocks. The only source from which any reserves may become available is Java, where considerable stocks were reported to be in existence more than a year ago. If trade with this area should be opened, there might be some sugar available for export during the canning season.

The Combined Food Board and its successor, the International Emergency Food Council, recommended allocations of sugar for the calendar year 1946 providing for consumption of around 65-70 percent of prewar levels in the major countries where wartime rationing controls are maintained. In some sugar exporting countries and in Central and South America wartime increases in purchasing power of consumers has resulted in greatly expanded consumption of sugar. The recommended allocations were based largely on the outturn of the 1945-46 sugar crop.

For the calendar year 1947 it is probable that recommended allocations will be continued in order to maintain an equitable distribution of the scarce supply. It is generally estimated that the world would require at current prices 3 to 5 million tons more sugar than is in prospect if there were no rationing controls. Current prospects point to allocable supplies about 10 percent more than was available in 1946.

In Europe as a whole there was some recovery in the acreage for harvest and the beet crop has made good progress. Currently, an output of beet sugar about one-fourth larger than the small production in 1945 is in prospect. Such a production would reduce the requirement of imported sugar which totaled about 2¼ million tons in 1946. For Europe excluding the United Kingdom the import total was about 700,000 tons.

In North America and the Caribbean production in 1946-47 is expected to be nearly 10 percent above that of 1945-46 with most areas sharing the increase. United States beet production may even surpass prewar levels, as a result of favorable sugar prices, improved technology, and a larger labor supply than was available during the war years. Good growing weather could result in a Cuban crop of around 5 million tons, as compared with 4,476,000 in 1946, and a Puerto Rican crop of around 1,000,000 tons as against 900,000 this year.

Production in 1946-47 in Africa and the Southwest Pacific is expected to total about 2,800,000 tons, or approximately the same as in 1945-46, but about 12 percent below the 3,200,000 tons produced before the war. Except for about 800,000 tons of Hawaiian production, the total is expected to be available for local consumption and export to deficit sugar areas in the Middle East, Indian Ocean, and Pacific.

In Asia total production in 1946-47 is expected to remain at approximately 7,300,000 tons, or about the same as in 1945-46. The decrease of more than three million tons as compared with prewar average production is almost entirely accounted for by the virtual destruction of the sugar industry in Formosa, Java, and the Philippines during the war. Only gradual recovery in these areas can be expected.

Production in Mexico, Central and South America during 1946-47 is expected to be about 3,300,000 tons, which is slightly above 1945-46 and approximately 25 percent above the prewar level. Increased purchasing power has resulted in rising prices and has stimulated production in these countries. Despite the substantial production increase, however, the area as a whole is expected to remain a net importer of about 150,000 tons.

FATS AND OILS

World production of fats and oils is expected to expand, but is unlikely to reach the 1935-39 level during the next few years. Political unrest in some sections of the Far East is retarding recovery of production in those areas. The output of whale oil is limited by international agreement to about 50 percent of the 1938 level. On the other hand the high wartime production of sunflower seed in the Argentine and soybeans in the United States probably will continue.

Total world production of visible fats and oils available for consumption in 1947 is estimated at about 18 million short tons, compared with the prewar production of approximately 21.6 million short tons. The total quantity available for international trade in 1946 was estimated at about 3 million short tons and will not greatly exceed this figure in 1947. In any case the quantity available for international trade is expected to be about 50 percent of the prewar.

Recovery of the production and restoration of the volume of fats and oils in international trade depend quite largely on resumption of output in the areas producing coconut, palm oil and palm kernel oil, particularly in the Netherlands Indies and in the Philippines and on the availability of oil seeds from China and Manchuria. Recovery of the copra industry in the Philippines has been rapid and production in 1947 may approach the 1935-39 level, but this increase in fats and oils available for international trade is likely to be offset by reduction in other exporting countries.

Resumption of exports from India are unlikely to reach previous volumes because of increased domestic consumption. The removal of embargos on fats and oils from Brazil depends upon an increase in the production of fats and oils in that country.

Fats and Oils: Estimated world production, 1/ average 1935-39, annual 1945

Commodity	Total in Oil or Fat Equivalent		
	Average 1935-39	Estimate 1945	Estimate 1946
	1,000 short tons	1,000 short tons	1,000 short tons
Edible Oils:			
Soybeans	1,360	1,590	1,500
Sunflower seed	630	865	850
Peanuts	1,615	1,660	1,670
Cottonseed	1,675	1,150	1,240
Olive oil.	960	575	800
Sesame seed.	675	565	560
Total	6,915	6,405	6,620
Palm Oils:			
Copra	1,610	400	800
Palm kernels	375	275	275
Palm oil	670	315	315
Babassu kernels. . . .	30	35	25
Total.	2,685	1,025	1,415
Industrial Oils:			
Flaxseed	1,170	1,165	1,105
Castor-beans	200	205	200
Rapeseed	1,365	1,335	1,420
Oiticica oil	10	15	15
Tung oil	150	90	100
Perilla seed	65	50	50
Total	2,960	2,860	2,890
Animal Fats:			
Butter	3,750	2,835	2,600
Lard	3,000	2,400	2,500
Tallow	1,400	1,600	1,600
Total.	8,150	6,835	6,700
Marine Oils:			
Whale	585	40	160
Fish	315	160	150
Total.	900	200	310
Estimate world total . .	21,610	17,325	17,935

1/ The production for each commodity was estimated from the percentage of each used as visible fats and oils. Allowances were made for seed, feed, and oilseeds consumed directly for human food. Since export figures are the only available data for most palm oils, an additional percentage was added for local consumption to arrive at total production as follows:

Percentage	Commodities
125	Copra, palm oil
110	Palm kernels
100	Olive oil, babassu, oiticica, tung, lard, tallow, whale, and fish.
95	Castor-beans

Percentage	Commodities
90	Sunflower seed, rapeseed, flaxseed, perilla.
85	Sesame
81	Butter
75	Cottonseed
65	Soybeans
60	Peanuts

The total supply of fats and oils available for meeting the 1946 import requirements was estimated at not less than 3 million short tons. Delays in exports from Argentina reduced the quantity that could be moved. High prices of vegetable oils can be expected to stimulate production of oil bearing seeds but any increase in acreage made in 1947 would have little effect on availability of supplies until late in that calendar year. The situation in 1946 when import requirements for fats and oils were double the supply available for export seems likely to continue through 1947. Demand in Europe exceeds that of prewar years because of the sharp decline in production of animal fats and butter and reduced oilseed production in the Balkan countries.

Although production of cottonseed in 1946 seems likely to exceed the low output of 10.2 million short tons in 1945, oil from the 1946 crop will not be adequate to meet requirements.

Production of about 1.2 million tons of oil will be far below the 1935-39 average of 1,675,000 tons and the record production of two million short tons in 1937. Domestic markets absorb most of the cottonseed oil production and only relatively small quantities from Egypt, the Sudan, Argentina and Brazil are likely to enter international trade.

Peanut production was expanded during the war, and should remain large through 1947. However, increasing domestic demands particularly in India will restrict the quantity of peanuts and peanut oil available to the international markets. Production of 1.7 million tons of oil in 1945 is likely to be equalled in 1946, but the quantity available for export and consumption in 1947 may not exceed the 385,000 short tons available in 1946.

World production of peanuts in 1946 should exceed the relatively low 9.5 million short tons of 1945. However, as 2/3 of the world crop is produced in Asia and most of the peanuts for export formerly originated in India and Africa, the availability of peanuts for export in 1947 depends on recovery of production and exports particularly in French West Africa and on the removal of restrictions affecting movements of the Indian crop. The United States crop is not likely to be much in excess of the domestic requirements of peanuts for food. African production has not increased to prewar levels and is not sufficient to balance the shortage of supplies in other areas.

Because of the wartime expansion in the United States world production of soybeans has been increasing despite a reduced output in China and Manchuria. The 1946 production in Manchuria, which formerly supplied about 90 percent of the soybeans for export, is reported to be materially below prewar. Exports of Manchurian soybeans have been negligible since 1943 and no large quantities can be expected from the current crop for shipment in 1947.

A harvest of sunflower seed in 1946 only slightly smaller than the record crop of 1944 should produce approximately 850,000 short tons of oil, of which approximately 100,000 tons primarily from Argentina should be available for international trade. The rapid increase of the sunflower acreage in Argentina has made that country the primary source of sunflower oil for export.

The very short crop of olives in 1945-46 which produced only 575,000 tons of oil was one of the smallest on record. Production in 1946 for consumption in 1947 although less than prewar average is expected to be approximately 800,000 tons. The general shortage of edible fats and oils prevented many olive producing countries from exporting olive oil. With the resumption of trade and a free movement of other vegetable oils, exports of olive oil could approach the volume reached in 1935-39. It seems likely, however, that larger quantities will be consumed locally and that the quantity available for international trade will not reach the prewar volume.

Under Japanese control output of copra and coconut oil in the most important producing areas declined during the war years, and the output in 1945 was about 25 percent of the prewar volume. About 85 percent of all the copra and coconut oil entering international trade during the prewar years originated in the Philippines, Netherlands Indies, Malaya and Ceylon. Exports of copra from the Philippines which totalled only 9,000 tons in 1945 seemed likely to exceed 500,000 tons in 1946. Production in the Philippines may approach the prewar level in 1947; but recovery in the Netherlands Indies and in Malaya has been slow. Availability of coconut oil in 1947 should, however, be much greater than it has been in 1946.

World exports of both palm oil and palm kernels in 1946 are about 60 percent of the prewar volume and appraisal of the present world situation is difficult. Most of the African production comes from wild trees and the amount consumed domestically is not known. Availability in Western Africa in 1946 has been far below expectation and the output in 1947 may not be greatly improved.

The strong demand for linseed oil has encouraged larger acreages in South American countries. The 1946 world flaxseed crop estimated at 140 million bushels will be approximately equal to prewar production, but is far below the quantity needed to supply linseed oil to meet the post war demand. Normally 80 percent of the flaxseed entering international trade originates in Argentina and a larger crop in 1947 in that country would increase the flaxseed for export. Demand in both Americas and the European countries is at a high level and if the crop in India is large enough any supplies available for export would be easily absorbed.

The production of rapeseed in Europe in 1946 should exceed the short crop in 1945 and supplies may exceed those of prewar. Production in China and India, normal sources of rapeseed oil, is uncertain and it is unlikely that substantial exports from these countries will be available. Production in the Asiatic countries was maintained without serious fluctuations during the war and availability for international trade depends largely on transportation and demands for this oil within the producing countries.

World output of lard, including pork fat, averaged about 3 million short tons before the war. As a result of the drastically reduced hog numbers in Europe, total production of lard dropped to 2.4 million tons in 1945, and is not likely to exceed that figure in 1946. The production of commercial lard in the United States, the principal producing and lard exporting country of the world, totalled over 1.6 million tons in 1944. Of this amount 30 percent was exported. Production in the United States is not expected to exceed 1 million tons in 1946, and the quantities available for export in 1947 will be reduced drastically below the record exports of 1944. In Argentina lard production and exports, which increased rapidly during the war, declined sharply in 1946.

Whale oil production for the 1945-46 season was about 30 percent of the prewar average of 585,000 tons. With Germany and Japan removed from industry only Norway and Great Britain engaged in Antarctic whaling in 1945-46. An increase in the number of whaling ships may increase the output of whale oil in 1946-47, but because the total catch of whales is now limited by international agreement, the output should not exceed 280,000 or 300,000 tons. Almost all the whale oil entering international trade originates in the Antarctic Ocean.

MEAT

Meat supplies, entering into world trade in 1946-47, from the principal exporting countries, are expected to be smaller than the 5.9 billion pounds exported during 1945-46. 1/ Reduction in exportable quantities will occur chiefly in the Western Hemisphere, particularly from the United States and Canada. Also the pipe line reserves have been materially reduced. The demand (import requirements) in the United Kingdom will remain large in 1946-47, but requirements in some of the war-devastated countries in Europe will be less critical, as domestic supplies in most continental countries will be somewhat better than in the first year following the war.

Imports which would be taken by the United Kingdom and other importing countries for 1946-47, in all probability, will continue to be in excess of exportable supplies available during the same period. These requirements cannot be expected to be materially decreased by domestic production until adequate feed supplies become available and breeding herds are restored. Any effort to expand production in the 1946-47 season cannot be reflected in greater slaughter before 1948 and then only to a limited extent. There also are indications that some of the other countries' requirements are being reduced, in accordance with ability to pay after the end of UNRRA assistance. Imports of all the importing countries for 1945-46 totaled about 5 billion pounds as compared with 3.7 billion pounds for the prewar period, an increase of over 35 percent.

It appears that United Kingdom, the principal importing country, will have little opportunity, if any, to acquire supplies in 1946-47 larger than the 3.5 billion pounds imported in the 1945-46 period. The 1945-46 imports were just about equal to the prewar (1934-38) imports. Requirements will continue high, and relaxing of rationing would further increase domestic needs. To meet these requirements, United Kingdom has to rely primarily on supplies from abroad, since domestic supplies in 1945-46 totaled only 2,000 million pounds in comparison with the prewar production of 2,815 million pounds. Meat imports from continental Europe in 1945-46 were only a fraction of the 600 million pounds imported annually prior to the war. This loss of supplies up until 1946-47 was more than balanced by heavy supplies from the United States and Canada.

World pasture and forage conditions in mid-1946 were, with but few exceptions, generally better than a year earlier. Feed grains and concentrates are now in somewhat better supply than during much of 1945-46, but considerable quantities of corn and other coarse grains will of necessity be required for human consumption. The shortage of bread grains, the increased use of coarse grains for human food and the high extraction rates of bread grains resulted in inadequate feed supplies in many countries, and especially in feed importing countries of western Europe. The effect was greatest in the case of hog production with many countries forced to cut back on their breeding programs. The

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1/ Includes United States, Canada, Australia, New Zealand, Argentina, Brazil, Paraguay, Uruguay, Chile, Denmark and Eire.

higher 1946 indigenous grain and feed production in most countries, less critical world grain supplies, and some easing in restrictions on extraction rates will permit a gradual expansion in livestock production over the next year. The effect on meat supplies in 1946-47, however, will be largely limited to some increase in slaughter weights compared to a year ago when many unfinished animals were slaughtered.

Meat production in the principal exporting countries of the world in 1946-47 is not expected to continue at the high 1945-46 level, when exports reached 5.9 billion pounds as compared with prewar exports of 4 billion pounds, an increase of more than 47 percent. During that year, a large quantity of the meat that came from the United States, as well as some quantities from other sources, went to the United Nations Relief and Rehabilitation Administration for relief use. The strong foreign demand, together with a scarcity of feed grains in many areas of the world, has led to slaughter of meat animals at lighter weights and to considerable liquidation of livestock. Rationing in many countries, likewise, contributed by holding down domestic consumption of meat to relatively low levels in order to meet contract obligations with the United Nations Relief and Rehabilitation Administration and importing countries. Termination of rationing in some countries, at present income levels, would materially increase domestic consumption and decrease export quantities.

Meat production in Argentina in 1946-47 is expected to be somewhat lower than during 1945-46, when heavy slaughter of cattle and hogs occurred because of the strong demand for corn and other grain for human consumption. Scarcity of corn and high grain prices resulted in animals being slaughtered at lighter weights and possibly deterioration of breeding herds. Slaughterhouse strikes and uncertainty of prices to be paid under the new Anglo-Argentine Agreement may hold up marketings in the early part of 1946-47. The heavy slaughter which occurred in the early part of 1946 was reflected in an increase in exports of 3 percent in comparison with prewar exports.

Argentina continues to be the principal meat exporting country of the world. During the 1945-46 period, exports totaled over 1.5 billion pounds, 37 percent below the record exports of 1944. After allowing for intra-hemisphere and Caribbean shipments, Argentina exported about 78 percent of her exportable surplus to the United Kingdom, with more than 9 percent going to France, some 6 percent to Belgium, and smaller quantities to the United States, Netherlands, Malta, Italy, Sweden and Spain. In 1946-47, under the new Anglo-Argentine Agreement, Argentina is committed to furnish a higher percent of her exportable surplus to the United Kingdom than was the case during the past year. Normally, most of the exportable meat surplus from Brazil, Uruguay, Paraguay and Chile, when available, moves to the United Kingdom market. In view of the Anglo-Argentine Agreement, it is possible that a greater quantity of the meat production in these countries will flow into neighboring countries, with lesser quantities going to the United Kingdom.

In 1946-47, meat production in Canada is expected to show a slight decline over the past year, and consequently a decrease may be reflected in exports for the year. Slaughter of cattle and hogs in 1946-47 may be somewhat down from the previous year (1945-46), because of a substantial decrease in hog numbers, and some decrease in cattle, sheep and lambs during the past two years. Although Canada, like the South American countries, had production greatly stepped up by the war effort in order to supply the United Kingdom with meat, her position in the world export market appears to be somewhat stronger than in the prewar era. This is evidenced by the existence of long-time agreements between the Governments of Canada and the United Kingdom, to supply the latter with substantial quantities of bacon and other meats. Canada's ability to hold this position, however, is dependent on the interrelationship between domestic prices of the various grain crops, and on foreign competition with other suppliers. However, during the 1945-46 production year, Canadian exports were more than four times the prewar level. For the 1945-46 period, Canada exported approximately 729 million pounds. About 70 percent of these exports went to the United Kingdom. The remainder of her exports for the year, except for small quantities to the United States, Newfoundland and Caribbean area, was shipped to France, Belgium and Netherlands and to the United Nations Relief and Rehabilitation Administration for relief in continental Europe. The relief shipments were made up primarily of canned meat and in some instances small quantities of salt pork.

United States meat production can be expected to remain near the 1945-46 level, which was less than the previous year's production of 22.9 billion pounds. From all indications, exports in 1947 will be drastically reduced because of the continued high level of meat prices in this country and reduced purchases for relief. This, however, does not include the Army's requirement in foreign countries.

In the 1945-46 production season, United States exported about 1.4 billion pounds of meat, but recently they were completely cut off because of large domestic requirements. Of the exports of 1945-46, approximately 14 percent was shipped to the United Kingdom, some 47 percent to the United Nations Relief and Rehabilitation Administration for distribution to the continent of Europe, and the remainder going to United States' possessions and other miscellaneous countries throughout the world. The exports for 1945-46 were about 45 percent lower than the previous high year of 1943 when exports reached 2.5 billion pounds. Prior to the war, United States exports were rather insignificant, but during the war sizeable quantities of meat were shipped abroad for military and lend-lease operations.

Better grain crops during the year and improved prospects this spring for crops and livestock in 1946-47 will tend to reduce livestock liquidation in Australia and New Zealand during the coming year. Meat production and exports may be expected to continue at about the 1945-46 level. The great bulk of their exports are shipped to the

United Kingdom with the remainder going principally to other British possessions in the Pacific and Middle and Far Eastern areas. In 1945-46, the exports of these two Dominions exceeded prewar exports by more than 24 percent.

Denmark and Eire also are exporting countries that have shown some slight improvement during the year and exports from Denmark can be expected to increase further in 1947. Any surplus of meat products from these two countries is finding a ready market in the United Kingdom. A small quantity of Denmark's production may go to continental Europe. Shortage of feed grains and reduced breeding herds have been holding their meat production down to about 60 percent of prewar.

While Denmark is striving to regain her position in international trade, Norway is making a strong effort to rehabilitate her livestock industry and to place it on a self-sufficiency basis. Sweden, like Denmark, Norway and Eire at the present time, is dependent on imported feeds for increasing present production levels. The livestock industry in France is reported as making a rapid recovery. Netherlands can be expected to make fairly rapid recovery as soon as crop and pasture lands are restored to their former condition. Belgium's meat production, also, is making reasonable recovery.

Some of these countries will need to continue importing some of their meat requirements if their level of consumption is to be improved during the next year. Switzerland, Italy, Spain and others will depend on outside sources for much of their meat requirements. Any substantial rise in consumption will depend chiefly on the availability of supplies and individual purchasing power.

In the prewar period, the Central, Eastern and Southern European countries produced almost sufficient meat for their immediate needs. Only Germany, Italy and Austria imported small quantities, while Czechoslovakia, Poland, Bulgaria, Hungary, Yugoslavia and Rumania exported meat. Official data for the war and post-war periods are not available, but reports indicate some recovery in meat production. There, apparently, was considerable deterioration in herds during the war. The recovery of meat production in these countries is reported to be retarded by shortage of feed grains and protein supplements, and unfavorable pasture conditions on account of drouth, livestock diseases, requisitions of occupying troops and heavy war reparations in some of the countries. Despite these difficulties, these countries can be expected to improve their meat production over the next several years.

FISH

Increasing quantities of fresh fish were available in 1945/46 especially in areas of short food supply. Further expanded production is expected in 1946/47. Producing countries are enlarging their activities as equipment becomes available and reports from many consuming centers stress the contributions of fish to local food supplies. Canned and salt fish continue under allocation with larger quotas available to most areas this year.

Fishing areas closed by the war have now been producing for about a year and fishing fleets are approaching their prewar capacity. In the North Sea, abundant catches are being taken. The United Kingdom is meeting its own requirements and Norway has built up salt fish production after allowing for a much larger domestic consumption of fish. Danish and German vessels are also taking large hauls in this area. European vessels are reappearing on the Grand Bank and will contribute to the food supply of France, Spain, and Portugal. In the Pacific, the area open to Japanese fishermen has been enlarged, and while the total catch is about half its prewar size, all is now consumed in Japan and may be 60 to 80 percent of the prewar level of 3 million metric tons.

Supplies of fresh fish in many food deficient areas have not, however, lessened the overall need for canned and salted fish. Most of the world supply of these commodities remains under international allocations through June 1947. Production of canned and salted fish in 1946/47 is little changed from a year earlier but some shift in distribution will make larger quantities available this year to normal markets for these products.

Allocable supplies of canned fish are estimated at slightly less than 1 billion pounds for the period July 1, 1946 to June 30, 1947. This includes the total production of the United States and Canada and the exportable surpluses of other countries, principally Norway, Spain, and Portugal. The decline in military requirements was only partially offset by the additional inclusion of UNRRA, and supplementary allocations may be available to some areas later in the year.

Salt fish supplies from exporting countries stepped up from about 275 million pounds in 1945/46 to 293 million pounds, dry salt basis, in the current period. The increase is due largely to Norway's surplus of 124 million pounds. Other contributors to the pool are Newfoundland, Canada, Denmark, and Greenland. Iceland, once the third largest producer of salt fish, has resumed salting to some extent following the loss of fresh fish outlets in the United Kingdom, but is not participating in international allocations.

A review of the procurement arrangements made by claimants for salted fish will be made in late 1946. No price schedules were recommended in connection with the program this year, and in the event of undue delay in completing contracts, available supplies may be reallocated to insure utilization.

MILK AND DAIRY PRODUCTS

Less milk and dairy products will be available in 1946-47 than for the previous year in those countries of the world contributing or sharing in divisible supplies. Reserve supplies were much smaller at the beginning of the current year than a year earlier. Stocks that had accumulated under wartime programs were available for consumption in 1945-46, but are lacking in the current year. Furthermore, a lower production is indicated in North America, an important supplying area in recent years. Improvement in producing conditions over last year in many consuming countries will result in a higher indigenous production, thereby offsetting in part reduced supplies from abroad. The lower volume of international shipments of dairy products during 1946-47 can be largely attributed to expected decreases in United States and Canadian exports. Trade, however, in specialty products will probably show some revival.

The reduction in supplies of dairy products available from producing countries will undoubtedly result in smaller imports for buying countries in western Europe and for countries that have been receiving aid from UNRRA. This reduction will be especially applicable for cheese and canned milk. The United Kingdom is also apt to receive less cheese. Slightly higher butter supplies, however, may be available to the United Kingdom and fluid milk supplies there are running above a year ago.

In general, world supplies of dairy products in 1946-47 will be appreciably below effective demand at prices that prevailed through last year. While the requirements for military forces and international relief agencies will be less, the demand on the part of buying nations and commercial handlers will continue strong, particularly for canned milk and dried whole milk.

Prospective higher butter production in Denmark and New Zealand may result in slightly larger supplies entering world trade. World output, however, is currently less than three-fourths of prewar levels. The strong demand for cheese in the United States and reduced production in Canada may materially reduce the quantity available for international movement in 1946-47, compared to the previous year. Stocks are also at a lower level. A similar situation exists with respect to canned milk. Production is sharply lower in North America, the main source of supply, and domestic demand continues high. The supplies of sweetened condensed milk are especially short of overall demand. The output of dried milk has been well maintained in most producing countries and supplies have been further augmented by resumption of production in the Netherlands. Supplies of non-fat dry milk solids are reasonably adequate but the demand for dried whole milk has been large.

In Canada and United States, heavy culling of milk cows has occurred in the past year because of uncertainty in returns for milk and the relatively high prices paid for animals for slaughter. As a result, the number of milk cows in the United States and Canada in mid-1946 was 4 and 2 percent, respectively, below a year earlier. These sharp declines can be only partially offset by a higher output per cow that may come from heavier feeding. Feed supplies for the current year may be more readily available but prices are expected to average higher. The governments of the 2 countries are urging a lower rate of culling as a means of holding up milk supplies.

In 1946-47 Argentina is likely to export still less in the way of dairy products than in the previous year. High grain prices have caused pastures to be ploughed up and higher beef prices will stimulate emphasis on raising of stock for beef production at the expense of milk and dairy products. Strong domestic demand will also tend to reduce supplies for export.

New Zealand is expected to export more butter and cheese in 1946-47 than in the past season when supplies were reduced by a severe summer drought. Increased quantities of fertilizer and better supplies of other items should favor a good year.

Conditions in the more important dairying districts of Australia are very favorable for a high level of output this season. Gradual improvement has been experienced over the adverse conditions prevailing 2 and 3 years ago. High levels of output are expected for butter, cheese, canned and dried milk, although the first 2 will not reach the record output reached in the early years of the war.

Because of higher cow numbers in the United Kingdom, milk production in 1946-47 is expected to reach record levels, although production per cow will still be below prewar levels. Possible improvement in feed supplies may forestall necessity for some liquidation of herds and permit appreciable increase in output per cow. Production has shown a steady improvement throughout 1946. Milk is still rationed in the United Kingdom and any increase in output will readily be absorbed in fluid consumption. Only during the season of flush production will any appreciable quantity of milk be used in the manufacture of dairy products.

With some additions of heifers to milking herds and favorable forage conditions, dairy production in most countries in western and central Europe has improved appreciably over last year. Output per cow is expected to show some increase in 1946-47 over the previous year. However, total milk output is still appreciably below prewar as output per cow had fallen on the average from 15 to 20 percent by the end of the war.

Improved facilities and transportation for handling milk in Europe should result in far better distribution of supplies in 1946-47 than a year earlier. Urban centers of population will still suffer, however, from insufficient supplies of milk and other protective foods during the winter.

Improvement in milk production per cow offers the greatest possibility to improve the supply of milk and dairy products. An average improvement in output this year over last of 5 percent in western and central Europe would result in about 5 billion pounds more milk and an average increase of 10 percent, about 10 billion pounds more milk. Increases within this range would more than offset the supplies received from abroad in 1945-46. Compared to prewar, however, there will be less milk in 1946-47 for all uses.

EGGS

Fewer eggs and egg products will be available in the 1946-47 consumption year to bolster the supply of protein foods than in the previous year. This will reflect the short world supplies of feed that have existed for a number of months. Also stocks of egg products accumulated for war purposes that were supplied in 1945-46 to food deficient countries will not be available this year. Egg consumption in the principal exporting countries will be about the same as last year except possibly in the United States, where consumption may be lower. Slightly larger supplies of eggs in shell and dried form may be available in the United Kingdom. Indigenous supplies in continental Europe will tend to improve during the next year, but production still remains considerably below prewar.

In 1946-47, export supplies of about 400 million dozens of eggs (shell equivalent) may be available from the 5 principal countries of United States, Canada, Australia, Argentina and Denmark. This will be about 20 percent below the 1945-46 exports of about 500 million dozens. United States exports of eggs are expected to drop sharply compared with last year but those of Canada and Australia to increase. About one-fourth of the export supplies will move as shell eggs and the balance in dried and frozen form.

As import requirements for the United Kingdom alone may be as much as 450 million dozen (shell equivalent) it appears that demand in importing countries will readily absorb all available supplies in 1946-47. From 25 to 50 million dozen shell eggs, together with some dried eggs, can be expected to move commercially to other countries.

At present eggs continue to be rationed in most countries of Europe as production continues considerably below prewar and far short of demand. Production is expected to be at satisfactory levels only in Belgium and Sweden. Production is much less satisfactory in Norway, Finland, Netherlands, Switzerland and Italy. In the Balkans production has improved somewhat over the low levels of last year.